TOWN OF NEW MARLBOROUGH
HIGHWAY DEPARTMENT

PLAN AND PROFILE OF

HARTSVILLE-NEW MARLBOROUGH ROAD (ROUTE 57)

IN THE TOWN OF

NEW MARLBOROUGH

BERKSHIRE COUNTY

FEDERAL AID PROJECT NO. N/A

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	17
PROJECT FILE NO.			

TITLE SHEET & INDEX

INDEX

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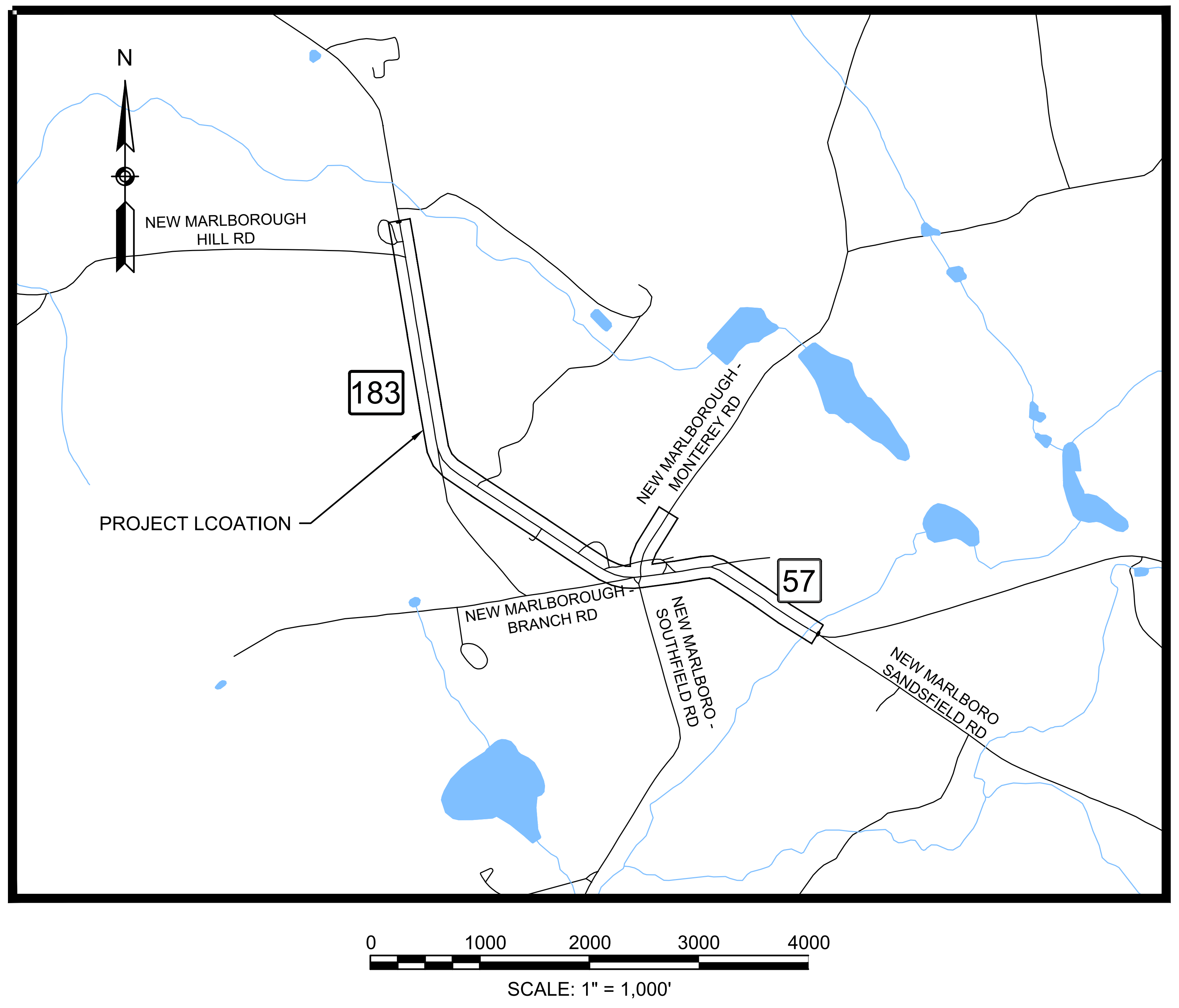
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NEW MARLBOROUGH HILL RD
183
PROJECT LCOATION
NEW MARLBOROUGH - MONTEREY RD
57
NEW MARLBOROUGH BRANCH RD
NEW MARLBORO - SOUTHFIELD RD
NEW MARLBORO SANDSFIELD RD
0
1000
2000
3000
4000
SCALE: 1" = 1,000'

THESE PLANS ARE SUPPLEMENTED BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2022, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

LENGTH OF PROJECT = 7,000 FEET = 1.33 MILES

DATE	DESCRIPTION	REV #

REGISTERED PROFESSIONAL ENGINEER **DATE**

PREPARED BY:

GM2 ASSOCIATES
10 CABOT RD, SUITE 101B
MEDFORD, MASSACHUSETTS 02155
www.gm2inc.com 617 776 3350

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	17
PROJECT FILE NO.			

SURVEY & GENERAL NOTES

SURVEY NOTES

1. THE EXISTING DETAIL SHOWN ON THESE PLANS IS LIMITED IN CONTENT AND APPROXIMATE IN LOCATION, AND IS BASED UPON MASSGIS AERIAL ORTHO IMAGERY AND AVAILABLE RECORD CONSTRUCTION PLANS. ACTUAL FIELD CONDITIONS MAY VARY.

2. NO EASEMENT RESEARCH WAS COMPLETED FOR THIS PROJECT. EASEMENTS SHOWN HEREON ARE FROM PLANS WHICH WERE FOUND WHILE COMPILING PROPERTY LINES.

3. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE MASSGIS INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.

GENERAL NOTES

1. THE LOCATIONS OF EXISTING SUBSURFACE STRUCTURES, SUCH AS SEWERS, WATER MAINS, DRAINS AND OTHER UTILITIES ARE APPROXIMATE ONLY AND THE ENGINEER DOES NOT GUARANTEE THEIR NUMBER OR LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE EXCAVATING.

2. THE CONTRACTOR SHALL DIG TEST PITS AT EXISTING DRAINAGE STRUCTURES TO DETERMINE EXISTING INVERT ELEVATIONS INDICATED ON THE PLANS AS N/A (NOT AVAILABLE). PROPOSED DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH THE PROPOSED DRAINAGE OR UTILITY DESIGN. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR REQUIRED BY THE ENGINEER. ONLY AFTER THE CONTRACTOR VERIFIES ELEVATIONS FOR THE CONSTRUCTABILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED.

3. ALL PROPOSED DRAINAGE CONNECTIONS TO EXISTING STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE NEW PIPE.

4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE UTILITY COMPANIES DOING WORK IN THE SAME AREA. THE CONTRACTOR SHALL ALLOW THE UTILITY COMPANIES AND THEIR REPRESENTATIVES TO ADJUST AND/OR INSTALL THEIR SYSTEMS WITHIN TOWN/STATE OWNED STREETS AND EASEMENTS.

5. NO EXISTING PUBLIC UTILITY STRUCTURES SHALL BE ABANDONED AND/OR DISMANTLED WITHOUT AUTHORIZATION FROM THE ENGINEER.

6. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANIES WHEN THE INSTALLATION OF DRAINAGE LINES AND STRUCTURES ARE IN CLOSE PROXIMITY TO EXISTING UTILITY POLES.

7. THE CONTRACTOR SHALL COORDINATE WORK WITH THE OWNERS OF UTILITY POLES AND SHALL BE RESPONSIBLE FOR TRIMMING TREES AS NECESSARY TO ACCOMMODATE NEW UTILITY POLE LOCATIONS, AS MAY BE REQUIRED.

8. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR TEMPORARY SUPPORT WHILE EXCAVATING IN CLOSE PROXIMITY OF UTILITY POLES, IF REQUIRED BY THE UTILITY, AT NO ADDITIONAL COST.

9. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS.

10. CURBING AND EDGING SHALL BE FURNISHED AND INSTALLED AT LOCATIONS SHOWN ON THE PLANS AND/OR AS REQUIRED BY THE ENGINEER.

11. DRIVEWAYS SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AN/OR AS REQUIRED BY THE ENGINEER.

12. THE CONTRACTOR SHALL SAWCUT EXISTING BITUMINOUS CONCRETE ROADWAYS, BITUMINOUS AND CEMENT CONCRETE SIDEWALKS AND BITUMINOUS AND CEMENT CONCRETE DRIVEWAYS AS SHOWN ON THE PLANS AND AT THE PROPOSED LIMITS OF WORK.

13. WHERE THE NEW CONSTRUCTION COINCIDES WITH PRESENT TRAVELED WAYS.

    13.1. THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH THE TEMPORARY TRAFFIC CONTROL PLANS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR WORK ZONES.

    13.2. THE CONTRACTOR SHALL PERFORM HIS WORK IN A MANNER ACCEPTABLE TO THE ENGINEER SO THAT INTERFERENCE WITH AND INCONVENIENCE TO BUSINESS CONCERNS AND ABUTTERS, ON ACCOUNT OF THE CONSTRUCTION WORK, IS KEPT TO A MINIMUM.

    13.3. THE CONTRACTOR SHALL NOT BE ALLOWED TO PARK EQUIPMENT OR STOCKPILE EQUIPMENT OR MATERIAL ON THE TRAVELED WAYS OVERNIGHT OR WHEN NOT IN USE.

    13.4. THE CONTRACTOR SHALL MAINTAIN SAFE AND RESPONSIBLE ACCESS TO AND FROM ABUTTING PROPERTY PRIVATE WAYS, DRIVEWAYS AND ALL ALLEYS AT ALL TIMES DURING THE CONSTRUCTION PERIOD.

14. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.

15. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

16. ALL PROPOSED PAVEMENT MARKINGS SHALL BE PAINTED.

17. THE CONTRACTOR SHALL RESTORE ANY EXISTING SURFACE PAVEMENTS AND TURF WHICH IS TO REMAIN THAT IS DISTURBED BY THE PROPOSED WORK AND SHALL PATCH ALL HOLES RESULTING FROM THE REMOVAL OF FOUNDATIONS PER THE SPECIFICATIONS UNDER ITEM 451. HMA FOR PATCHING.

18. ALL ACCESSIBLE ROUTES, WALKWAYS, CURB CUTS, RAMPS, SIDEWALKS, DRIVEWAY OPENINGS, CLEARANCES AND SLOPE TOLERANCES SHALL CONFORM WITH THE ARCHITECTURAL ACCESS BOARD (AAB), 521 CMR AND MASSDOT CONSTRUCTION AND TRAFFIC STANDARD DRAWINGS.

19. ALL UTILITY COVERS WITHIN ACCESSIBLE ROUTES SHALL BE REPLACED WITH SLIP-RESISTANT COVERS.

20. PRIOR TO COMMENCING ANY WORK ON THE SITE, PRECEDING THE ARRIVAL OF EQUIPMENT, MATERIALS, OR VEHICLES TO THE SITE, AND PRIOR TO THE COMMENCEMENT OF ANY CLEARING ON THE SITE, THE CONTRACTOR SHALL ARRANGE A PRECONSTRUCTION TREE INVENTORY CONFERENCE ON THE SITE WITH THE ENGINEER AND REPRESENTATIVE MUNICIPAL TREE WARDEN TO IDENTIFY TREES AND SHRUBS THAT ARE TO BE PROTECTED OR REMOVED AND REVIEW APPROVED PROTECTION MEASURES. NO CLEARING OR PRUNING SHALL BE DONE WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.

21. THE CONTRACTOR SHALL PROTECT EXISTING SURVEY MONUMENTS AND SHALL RESET ANY MONUMENTATION DISTURBED BY HIS OPERATIONS.

22. ALL EXISTING PAVEMENT BELOW THE PROPOSED MILLING DEPTH DEEMED UNSATISFACTORY BY THE ENGINEER SHALL BE SAWCUT, REMOVED, AND REPAIRED PER THE SPECIFICATIONS UNDER ITEM 451. HMA FOR PATCHING.

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

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MA	-	3	17
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LEGEND & ABBREVIATIONS

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
▭ JB	☰ JB	JERSEY BARRIER
⊞ ⊕ CB	CB	CATCH BASIN
		CATCH BASIN CURB INLET
FP	FP	FLAG POLE
GP	GP	GAS PUMP
□ MB	□ MB	MAIL BOX
□	□	POST SQUARE
○	○	POST CIRCULAR
⊕ WELL	⊕ WELL	WELL
▫ EHH	▫ EHH	ELECTRIC HANDHOLE
○	○	FENCE GATE POST
○ GG	○ GG	GAS GATE
BHL #	BHL #	BORING HOLE
MW #	MW #	MONITORING WELL
TP #	TP #	TEST PIT
		HYDRANT
		LIGHT POLE
□ CO.BD.		COUNTY BOUND
		GPS POINT
Ⓒ	Ⓒ	CABLE MANHOLE
Ⓓ	Ⓓ	DRAINAGE MANHOLE
Ⓔ	Ⓔ	ELECTRIC MANHOLE
Ⓖ	Ⓖ	GAS MANHOLE
Ⓜ	Ⓜ	MISC MANHOLE
Ⓢ	Ⓢ	SEWER MANHOLE
Ⓣ	Ⓣ	TELEPHONE MANHOLE
Ⓦ	Ⓦ	WATER MANHOLE
■ MHB	■ MHB	MASSACHUSETTS HIGHWAY BOUND
□ MON		MONUMENT
□ SB		STONE BOUND
■ TB		TOWN OR CITY BOUND
△		TRAVERSE OR TRIANGULATION STATION
TPL or GUY	TPL or GUY	TROLLEY POLE OR GUY POLE
○ HTP		TRANSMISSION POLE
UFB	UFB	UTILITY POLE W/ FIREBOX
UPDL	UPDL	UTILITY POLE WITH DOUBLE LIGHT
ULT	ULT	UTILITY POLE W / 1 LIGHT
UPL	UPL	UTILITY POLE
		BUSH
•SIZE & TYPE		TREE
○		STUMP
		SWAMP / MARSH
∘ WG	∘ WG	WATER GATE
∘ PM	∘ PM	PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
100 99		CONTOURS (ON-THE-GROUND SURVEY DATA)
100 99		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
x	x	CHAIN LINK OR METAL FENCE
		WOOD FENCE
		HAY BALES/SILT FENCE
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		EDGE OF PAVEMENT
		LIMIT OF MICROMILLING AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
ℙ		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
Ø1	Ø1	CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
	□	WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
⊕		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
*	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
☒ RRSG	☒ RRSG	RAILROAD SIGNAL
OR ○	●	SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
	20'	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
	20'	MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
□	□	PULL BOX 12"x12" (OR AS NOTED)
▭	▭	ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
↰	↰	PAVEMENT ARROW - WHITE
ONLY	ONLY	LEGEND "ONLY" - WHITE
	SL	STOP LINE
	CW	CROSSWALK
	SWL	SOLID WHITE LINE
	SYL	SOLID YELLOW LINE
	BWL	BROKEN WHITE LINE
	BYL	BROKEN YELLOW LINE
	DWL	DOTTED WHITE LINE
	DYL	DOTTED YELLOW LINE
	DWLEx	DOTTED WHITE LINE EXTENSION
	DYLEx	DOTTED YELLOW LINE EXTENSION
	DBWL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY

ABBREVIATIONS (cont.)

GENERAL

R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

TRAFFIC SIGNAL ABBREVIATIONS

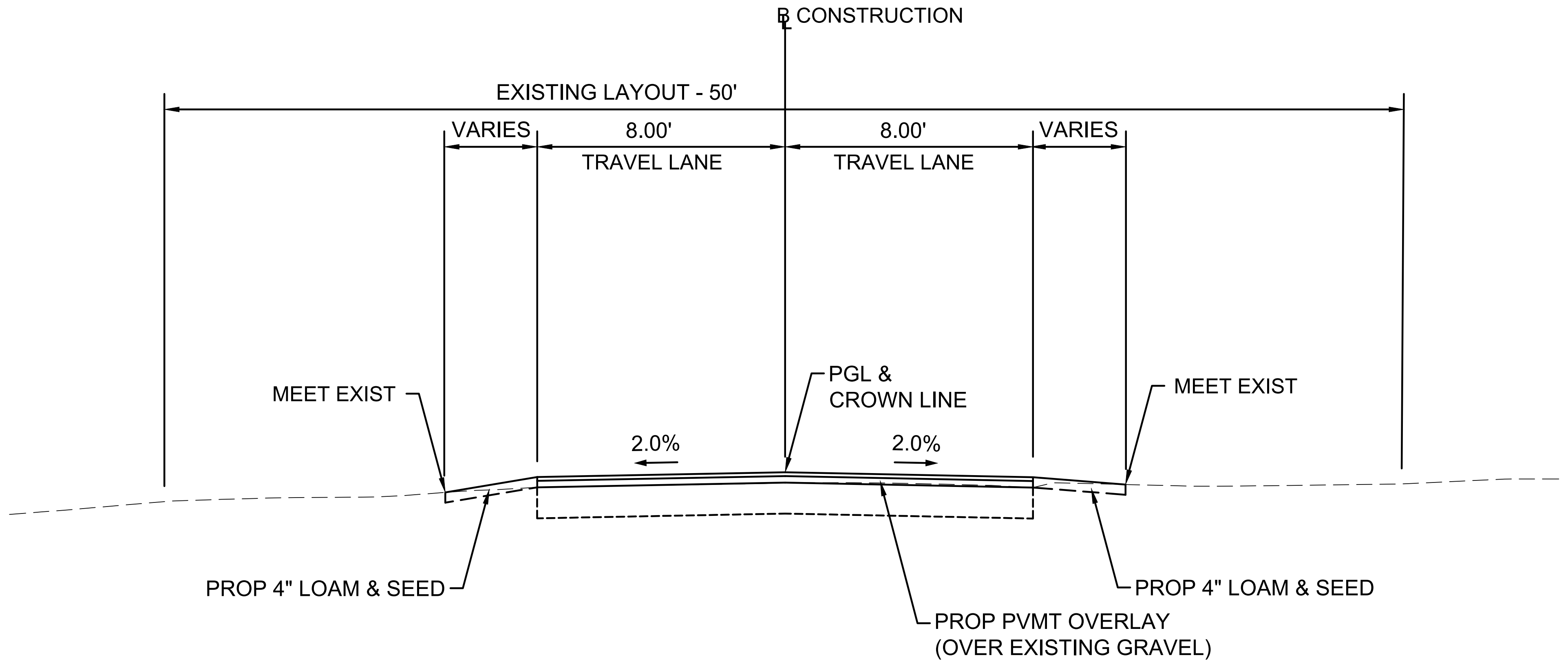
CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

40828.00_HD-3 NEW MARLBOROUGH ROUTE 57 - LEGEND.DWG Plotted on 3-Apr-2023 2:52 PM

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

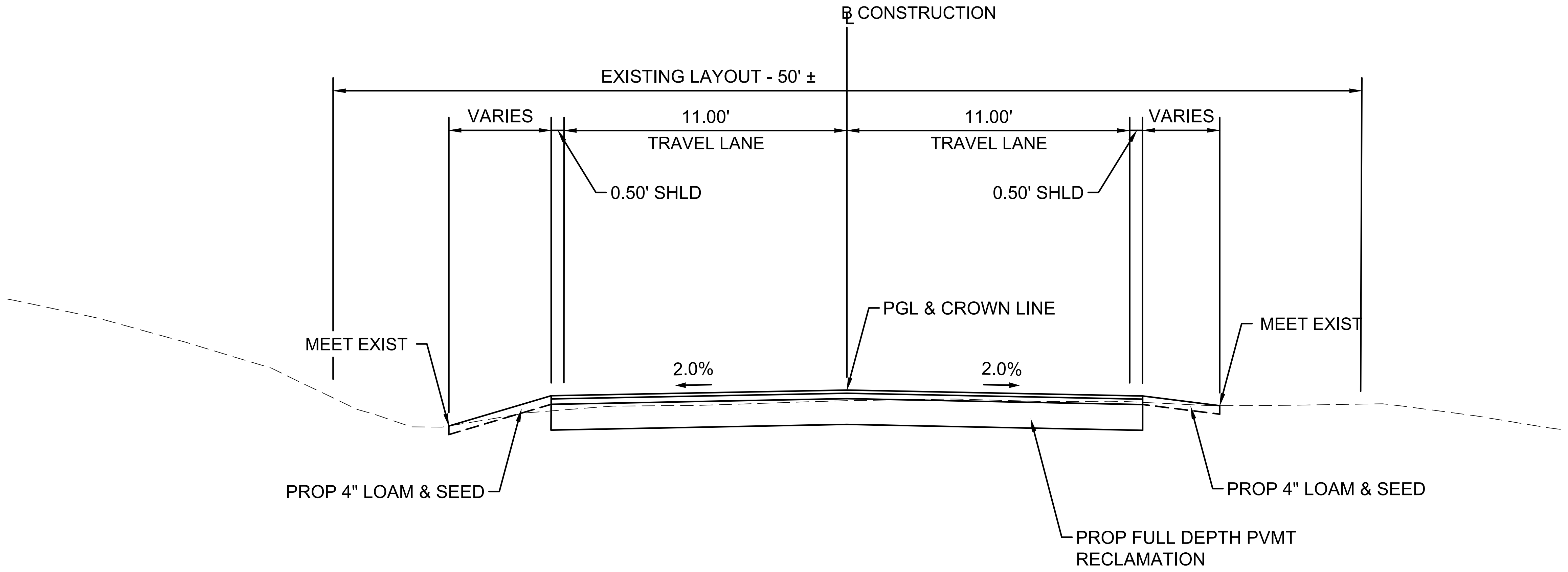
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	17
PROJECT FILE NO.			

TYPICAL SECTIONS & PAVEMENT NOTES



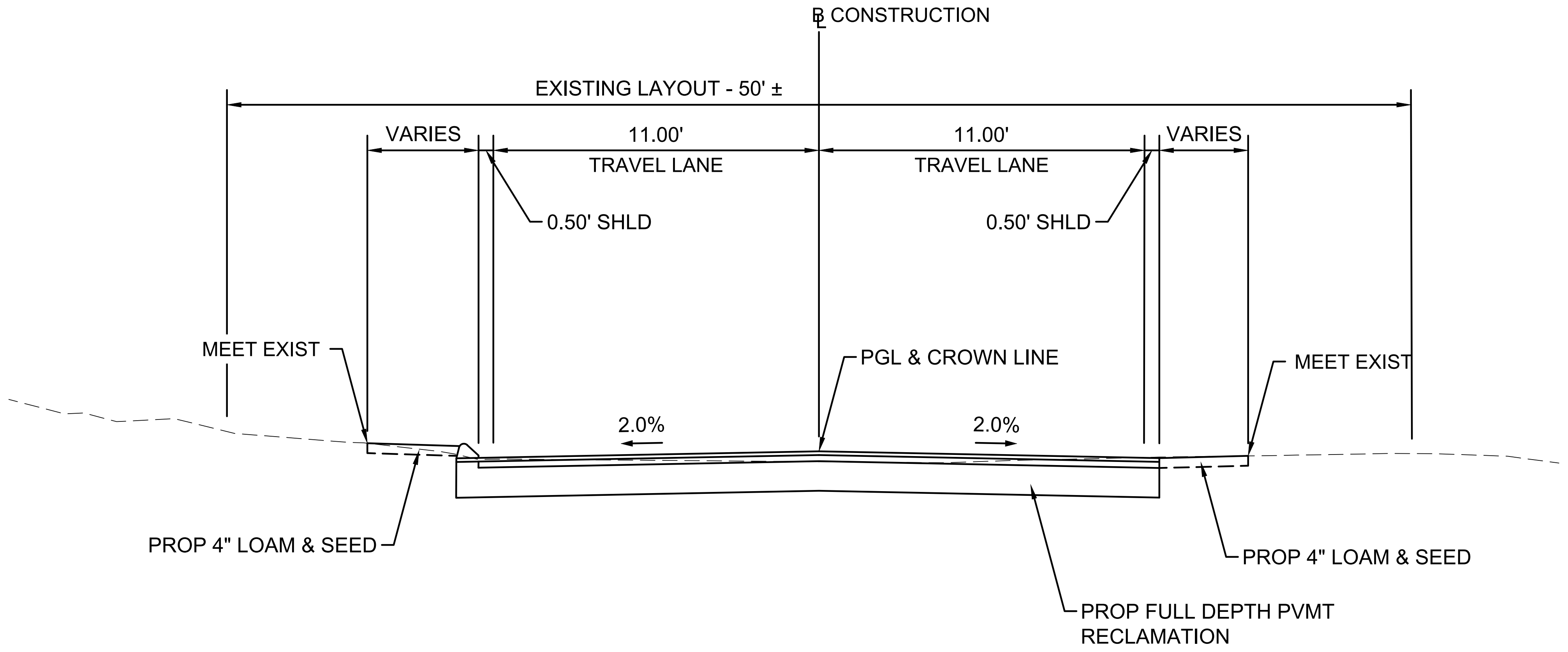
NEW MARLBOROUGH - MONTEREY RD

STA. 0+40± TO STA. 3+97±
1"=4'



HARTSVILLE-NEW MARLBOROUGH ROAD
(ROUTE 57)

STA. 6+81± TO STA. 21+68±
1"=4'



HARTSVILLE-NEW MARLBOROUGH ROAD
(ROUTE 57)

STA. 0+00± TO STA. 6+81±
STA 25+42± TO STA 29+01±
1"=4'

PAVEMENT NOTES

PROPOSED FULL DEPTH PAVEMENT RECLAMATION

SURFACE:	1 $\frac{1}{2}$" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5)
TACK COAT:	EMULSIFIED ASPHALT, GRADE RS-1, APPLIEDAT A RATE OF 0.05 GAL/SY
INTERMEDIATE:	2 $\frac{1}{2}$" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC - 12.5)
BASE:	12" RECLAIMED PAVEMENT FOR BASE COURSE

PROPOSED PAVEMENT OVERLAY

SURFACE:	1 $\frac{1}{2}$ " SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5)
BASE:	2$\frac{1}{2}$" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC - 12.5)

NOTES:

ASPHALT EMULSION FOR TACK COAT SHALL BE SPRAYED FOR 90% UNIFORM COVERAGE PRIOR TO PAVING, HMA JOINT ADHESIVE SHALL BE APPLIED TO ALL JOINTS IN THE SURFACE COURSE PRIOR TO PAVING.

40828.00_HD-4 NEW MARLBOROUGH ROUTE 57 - TYPICAL SECTIONS.DWG   Plotted on 3-Apr-2023 2:52 PM

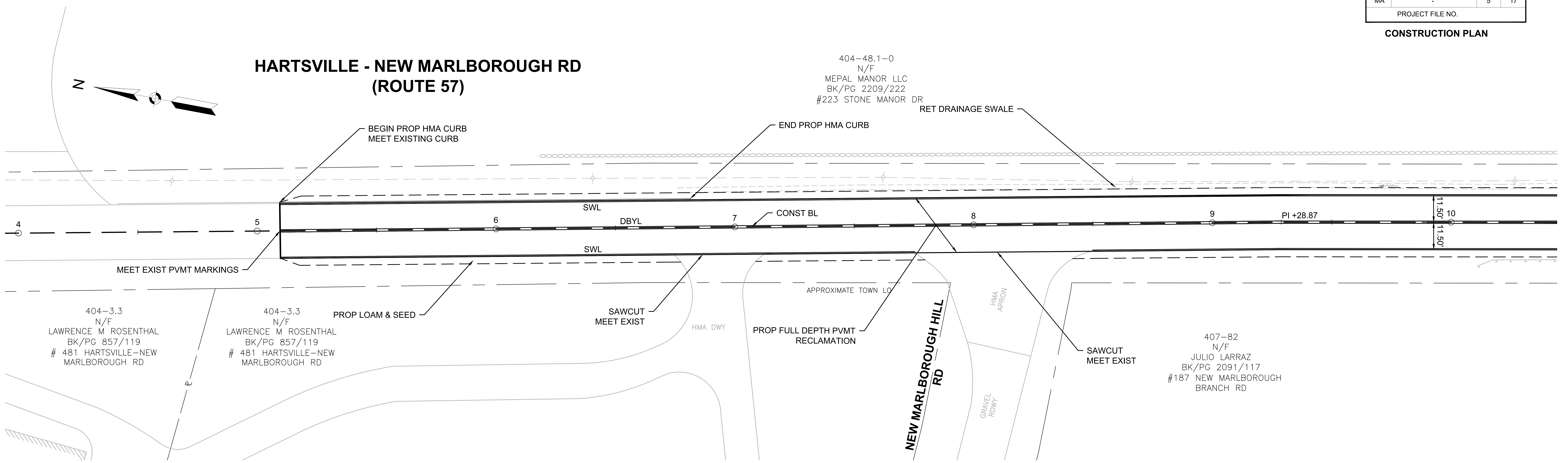
NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

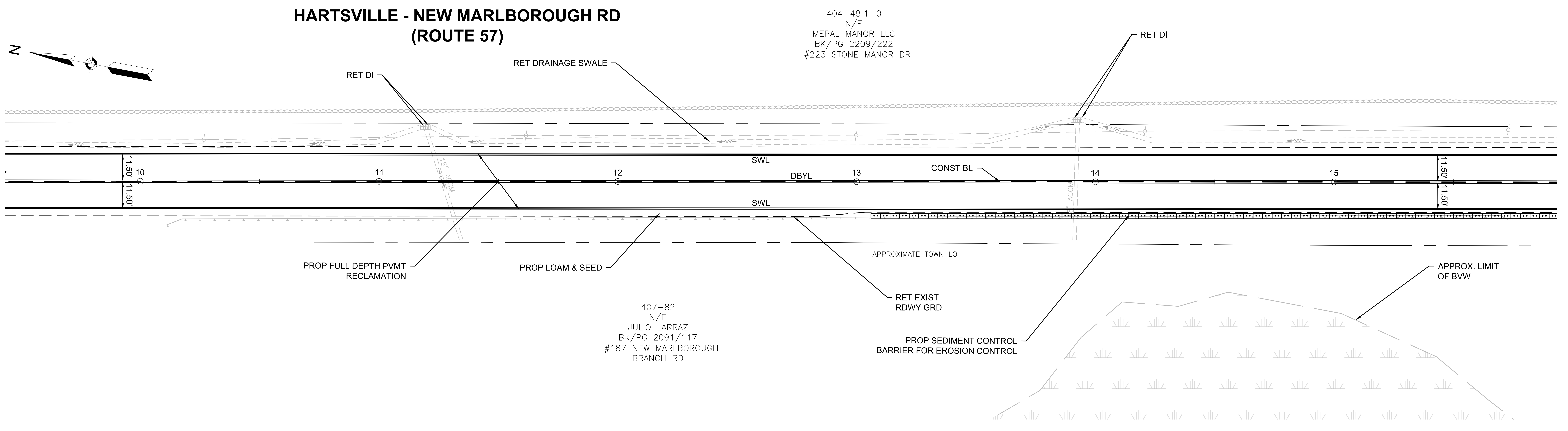
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	17
PROJECT FILE NO.			

CONSTRUCTION PLAN

Plotted on 3-Apr-2023 2:52 PM

40828.00_HD-5 NEW MARLBOROUGH ROUTE 57 - CONSTRUCTION PLAN.DWG

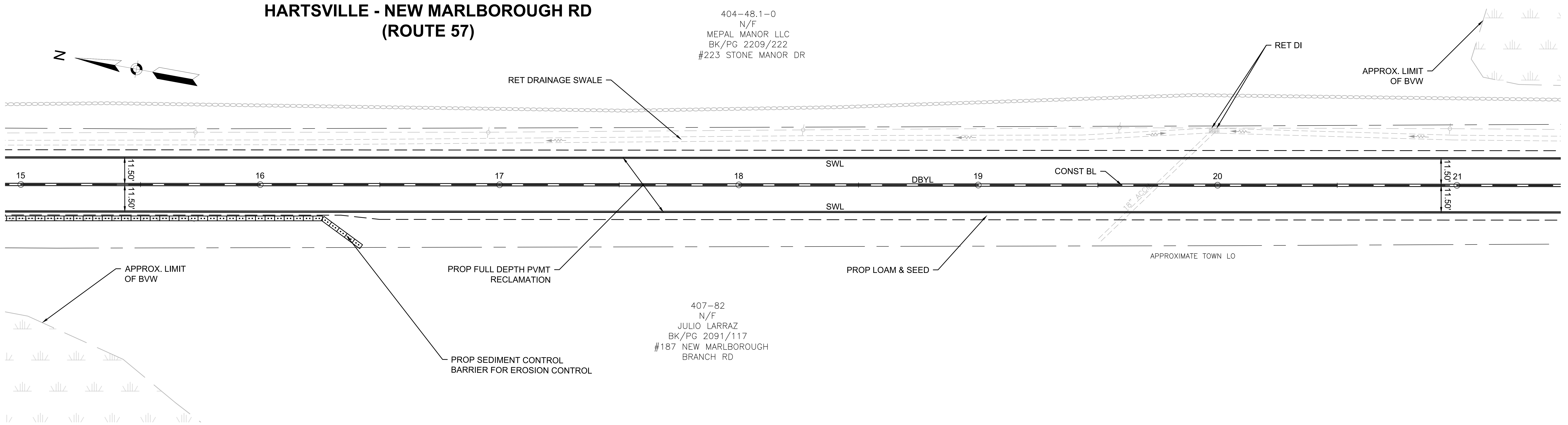


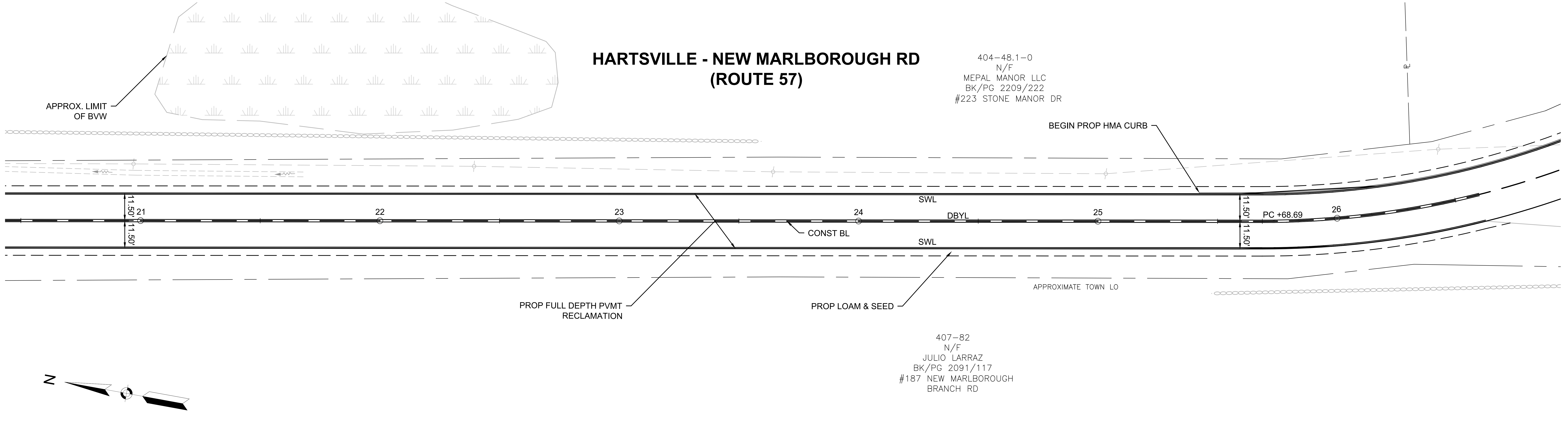


NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	17
PROJECT FILE NO.			

CONSTRUCTION PLAN





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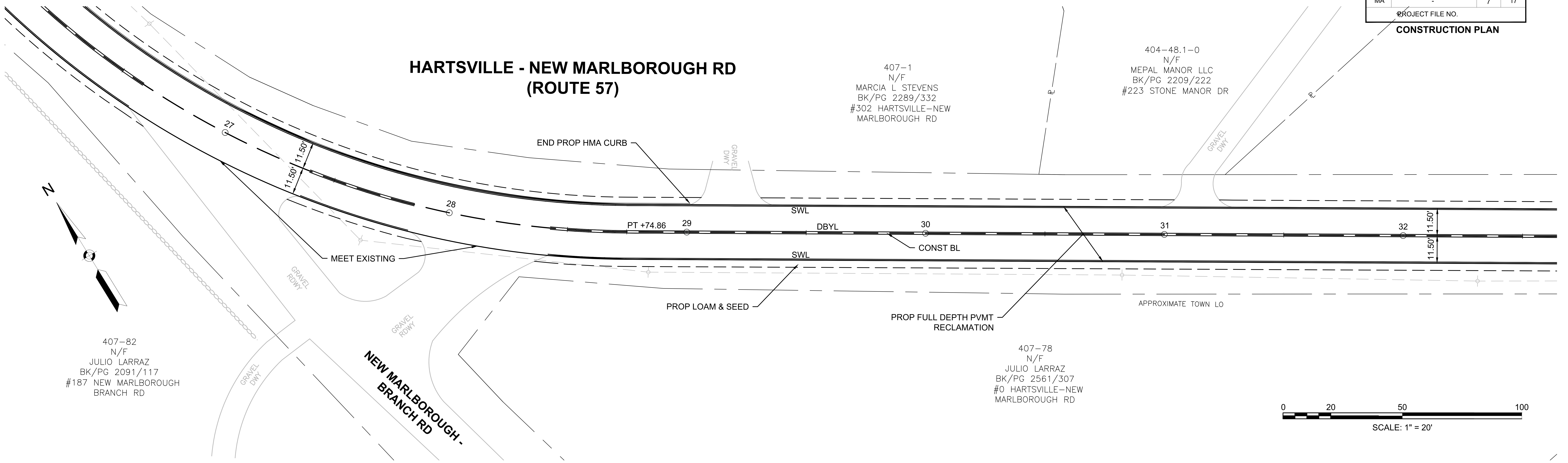
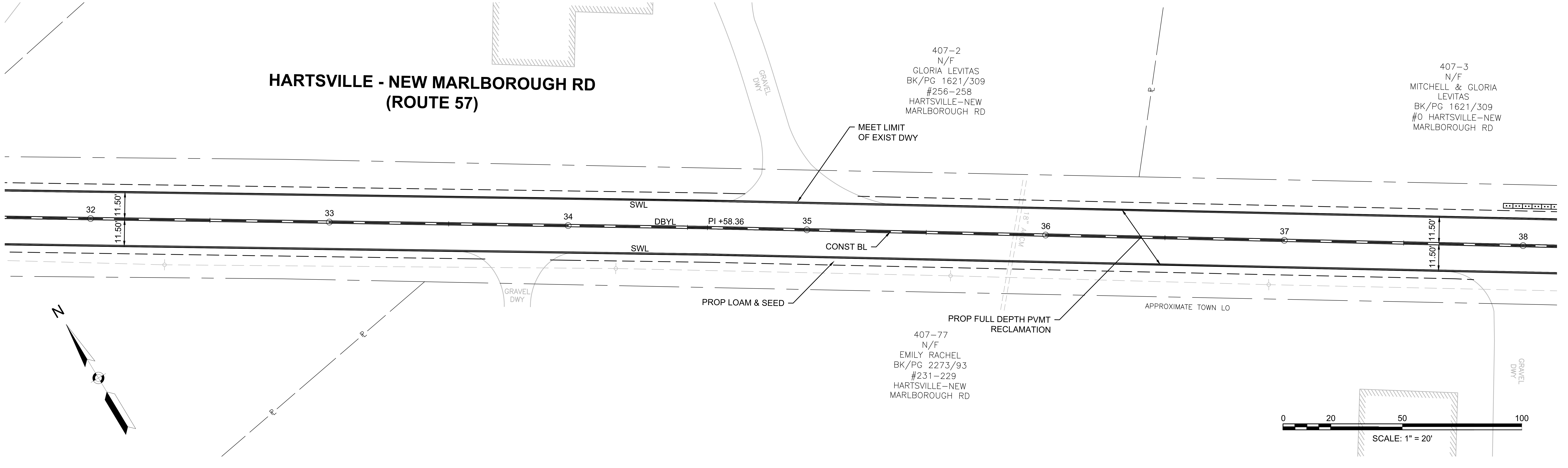
40828.00_HD-5 NEW MARLBOROUGH ROUTE 57 - CONSTRUCTION PLAN.DWG

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	17
PROJECT FILE NO.			

CONSTRUCTION PLAN





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NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	17
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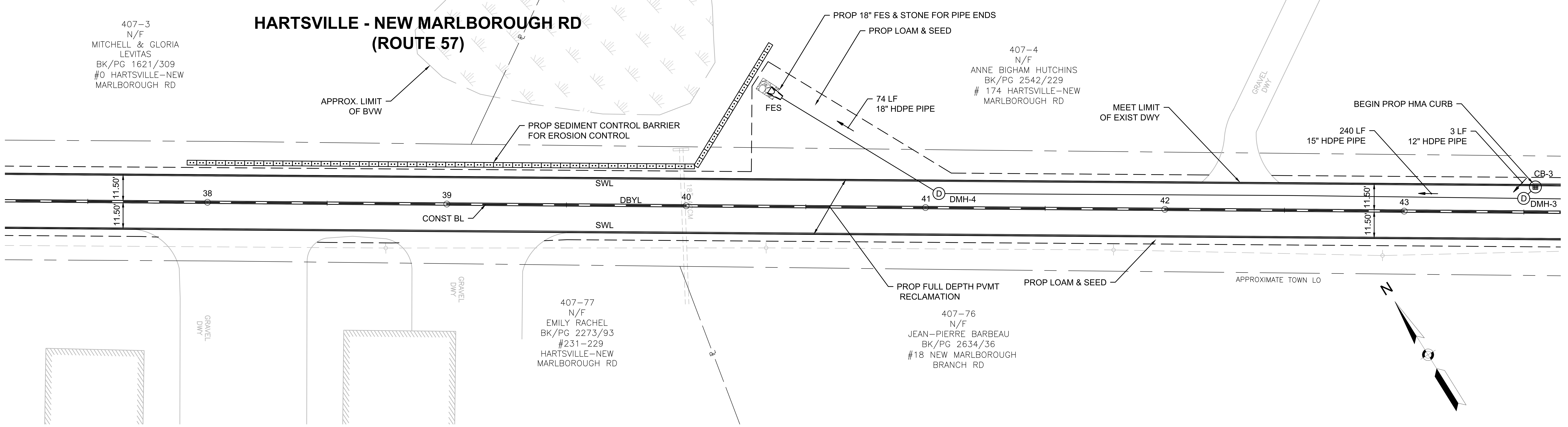
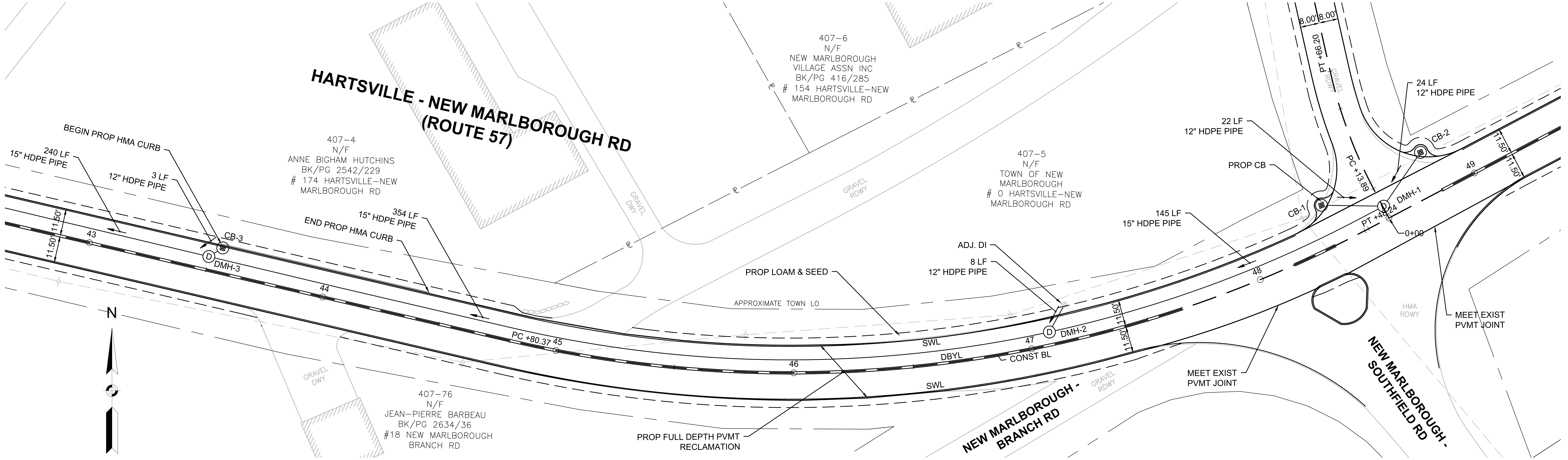
CONSTRUCTION PLAN



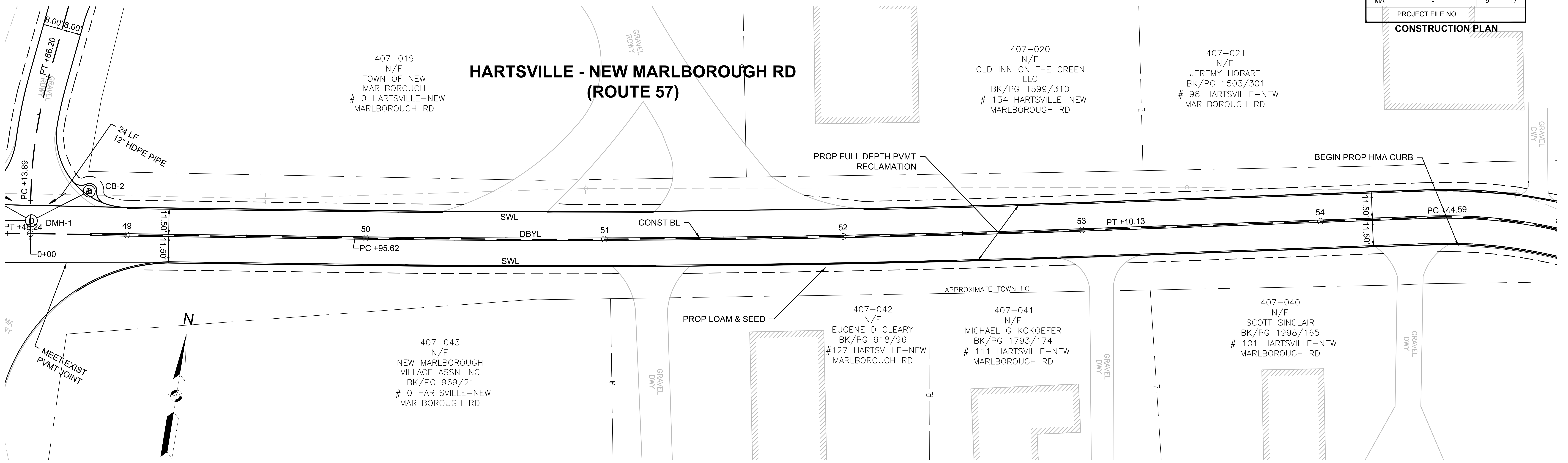


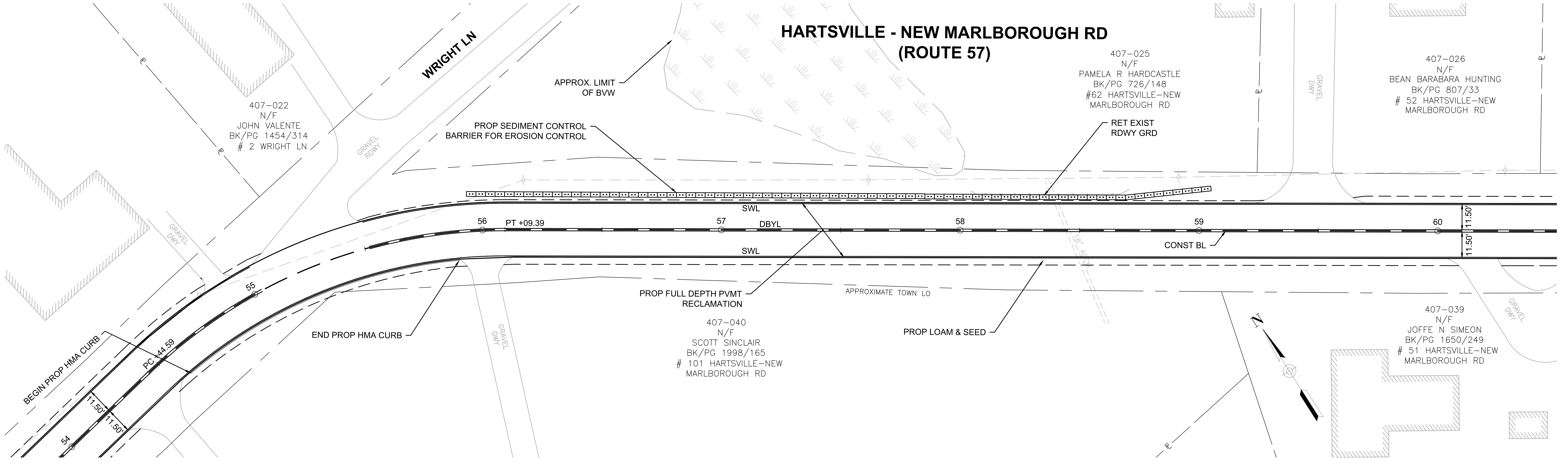
40828.00_HD-5 NEW MARLBOROUGH ROUTE 57 - CONSTRUCTION PLAN.DWG Plotted on 3-Apr-2023 2:53 PM

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	17
PROJECT FILE NO.			

CONSTRUCTION PLAN



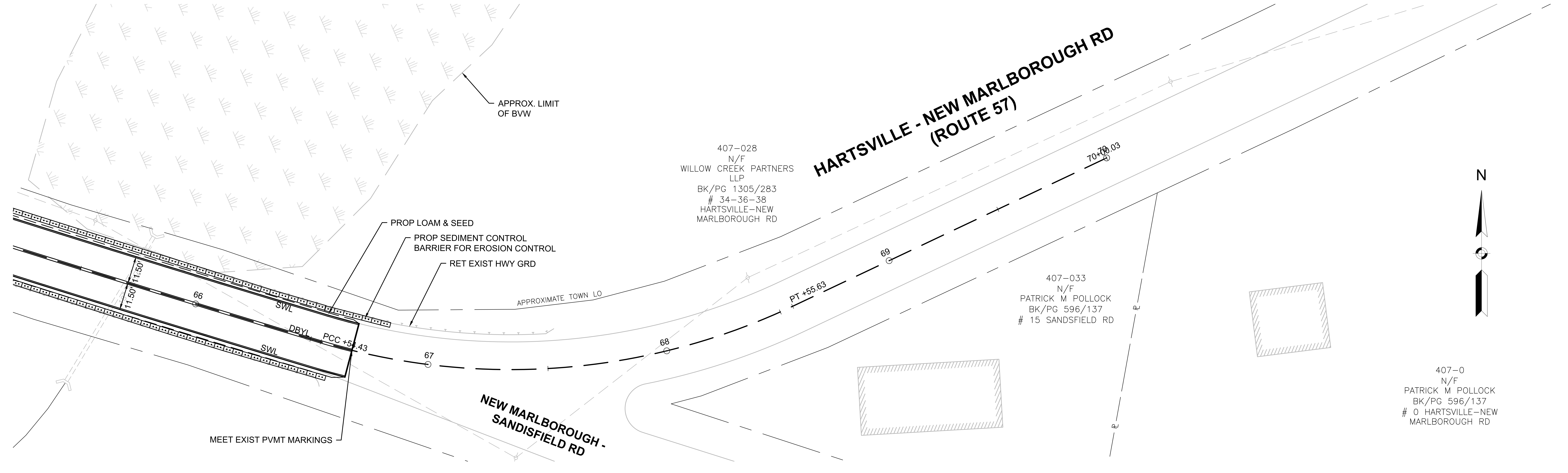


40828.00_HD-5 NEW MARLBOROUGH ROUTE 57 - CONSTRUCTION PLAN.DWG Plotted on 3-Apr-2023 2:53 PM

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	10	17
PROJECT FILE NO.			

CONSTRUCTION PLAN



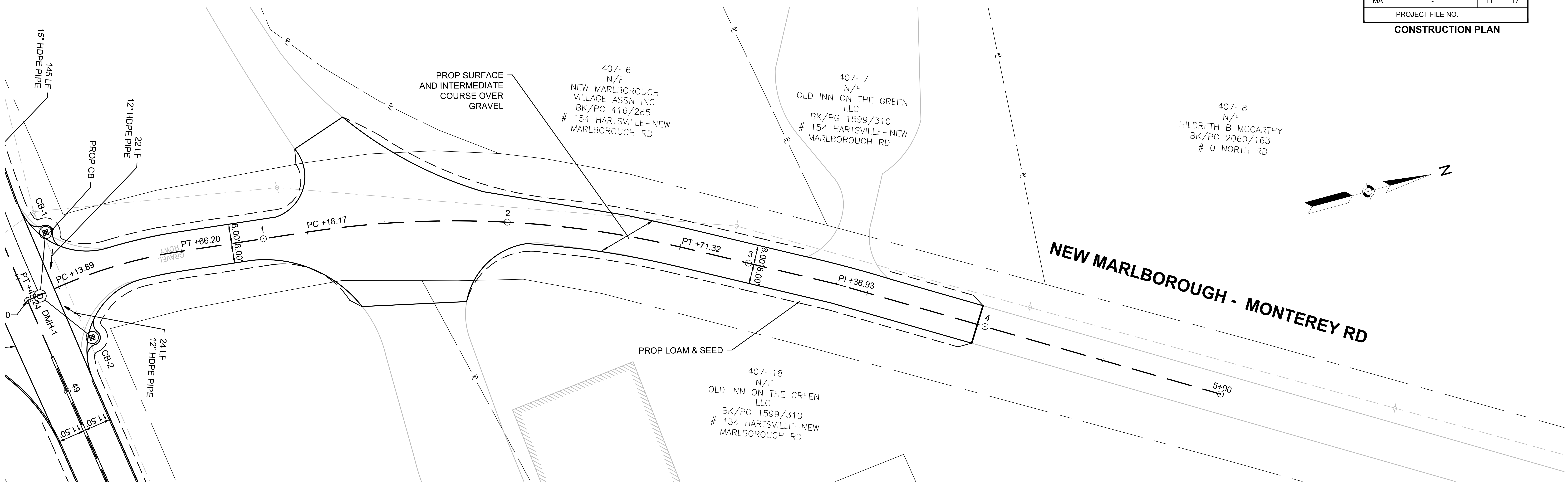
40828.00_HD-5 NEW MARLBOROUGH ROUTE 57 - CONSTRUCTION PLAN.DWG   Plotted on 3-Apr-2023 2:53 PM

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	17
PROJECT FILE NO.			

CONSTRUCTION PLAN

40828.00_HD-5 NEW MARLBOROUGH ROUTE 57 - CONSTRUCTION PLAN.DWG Plotted on 3-Apr-2023 2:53 PM



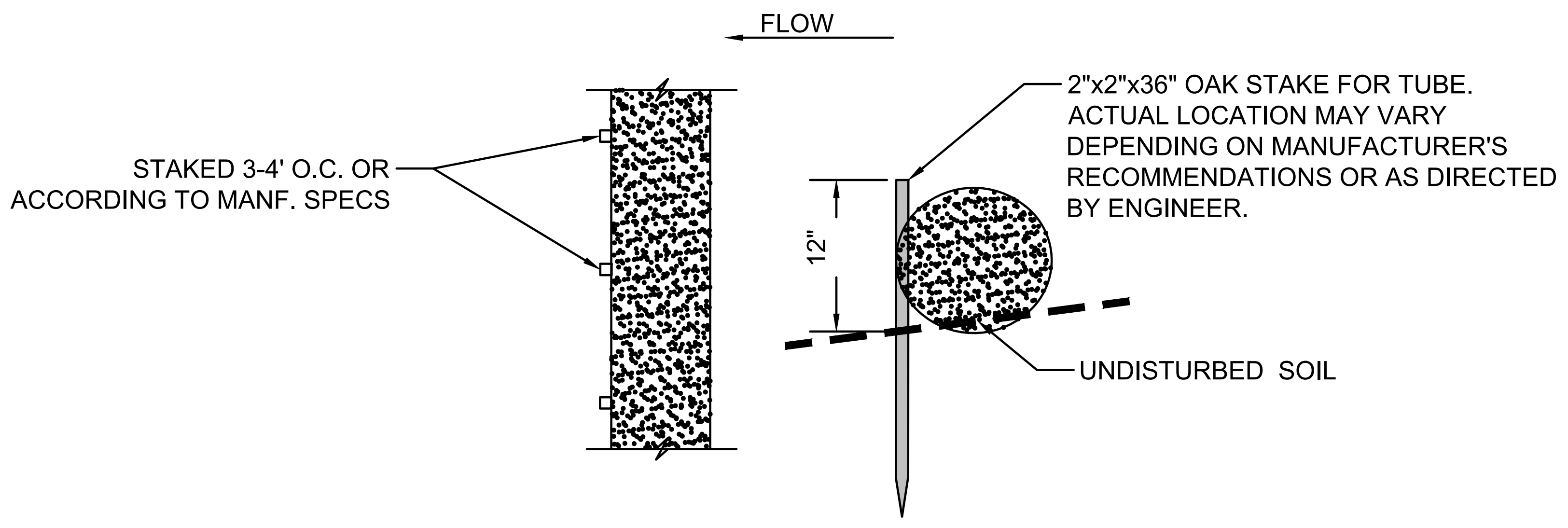
NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	12	17
PROJECT FILE NO.			

CONSTRUCTION DETAILS

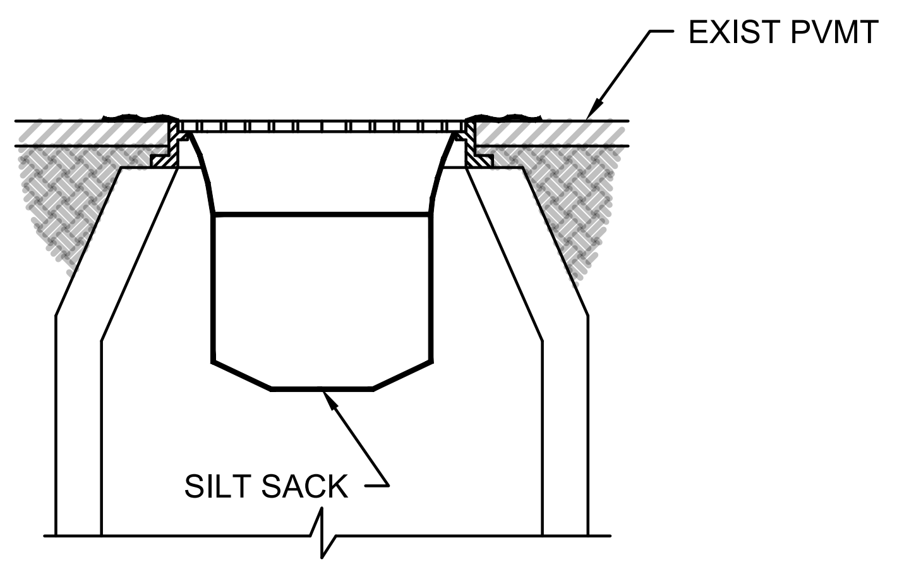
NOTES:

1. TUBES SHALL BE CONSTRUCTED OF STRAW, EXCELSIOR, OR COCONUT FIBER, CONTAINED IN BIODEGRADABLE, PHOTODEGRADEABLE, OR NON-DEGRADEABLE MESH CASING.
2. TUBES SHOULD BE INSTALLED PRIOR TO DISTURBING SOIL IN THE UP-GRADIENT DRAINAGE AREA.
3. WOODY VEGETATION AND TALL GRASSES MAY NEED TO BE REMOVED PRIOR TO INSTALLING THE TUBE TO PREVENT VOIDS THAT WOULD ALLOW SEDIMENT UNDER THE ROLL. THE TUBES SHOULD BE A MINIMUM OF 8" HIGH (WHERE EXTREMELY LOW GRADES OCCUR UP-GRADIENT) AND A MAXIMUM OF 12 INCHES HIGH.
4. IF THE SLOPE HAS A CONTINUOUS RUN OF GREATER THAN THE LENGTH OF THE TUBE, MORE THAN ONE TUBE MUST BE USED. WHERE UPGRADIENT SLOPES ARE LOW ANGLE, TUBES MAY BE ABUTTED END-TO-END. HOWEVER, WHERE STEEPER GRADES OCCUR UPGRADIENT (E.G., 4:1 OR STEEPER), IT MAY BE ADVANTAGEOUS TO OVERLAP THE ENDS OF EACH ROLL A MINIMUM OF 6" AND STAKE IN ORDER TO AVOID CREATING VOIDS BETWEEN ROLL ENDS.
5. TUBES SHOULD BE STAKED/SECURED IN PLACE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER. TYPICALLY STAKES ARE NOT DRIVEN THROUGH THE CENTER OF THE TUBES. IN MOST CASES, STAKES ARE PLACED IN FRONT OF/BEHIND THE TUBE OR THROUGH THE MESH ONLY. STAKING THROUGH THE TUBE CAN NEGATIVELY IMPACT ITS PERMITTIVITY.
6. WHEN CONSTRUCTION ACTIVITIES ARE COMPLETED, THE TRAPPED SEDIMENTS CAN BE SPREAD INTO THE SURROUNDING LANDSCAPE, SEEDED AND MULCHED, OR SHOULD BE COMPLETELY REMOVED FROM THE SITE.
7. WHERE PERMITTED, 100% DEGRADEABLE TUBES CAN BE LEFT IN PLACE AND ALLOWED TO DEGRADE NATURALLY. ANY PHOTODEGRADEABLE OR NON-DEGRADEABLE MESH SHALL BE REMOVED AND DISPOSED OF PROPERLY OFFSET.
8. INSTALLATION SHOULD CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER.
9. INSPECT TUBES REGULARLY AND AFTER RAIN EVENTS.
10. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH HALF THE HEIGHT OF THE TUBE. REPLACE IF ROLLS BECOME RIPPED, ROTTED, SEDIMENT CLOGGED OR OTHERWISE INEFFECTIVE AT TRAPPING SEDIMENT.
11. IF FLOW IS EVIDENT AROUND THE EDGES OF THE INSTALLED TUBE, EXTEND THE BARRIERS OR EVALUATE REPLACING THEM WITH TEMPORARY CHECK DAMS.
12. IF THERE IS EROSION OR UNDERCUTTING AT THE BASE OF SIDES OF THE TUBE, OR LARGE VOLUMES OF WATER ARE BEING IMPOUNDED BEHIND THE TUBE, THE TUBE MAY BE REINFORCED WITH AN ADDITIONAL SEDIMENT CONTROL MEASURE SUCH AS SILT FENCE OR A TEMPORARY ROCK CHECK DAM.


FLOW
STAKED 3-4' O.C. OR ACCORDING TO MANF. SPECS
12"
2"x2"x36" OAK STAKE FOR TUBE. ACTUAL LOCATION MAY VARY DEPENDING ON MANUFACTURER'S RECOMMENDATIONS OR AS DIRECTED BY ENGINEER.
UNDISTURBED SOIL

FILTER TUBES FOR SEDIMENTATION CONTROL
NOT TO SCALE

NOTES:
SILT SACKS SHALL BE PLACED IN ALL CATCH BASINS IN THE VICINITY OF NEW CONSTRUCTION. CATCH BASINS SHALL BE PROTECTED AS SHOWN, WITH MINIMUM WEEKLY MAINTENANCE, OR AS REQUIRED, AND REPLACED IF NECESSARY.

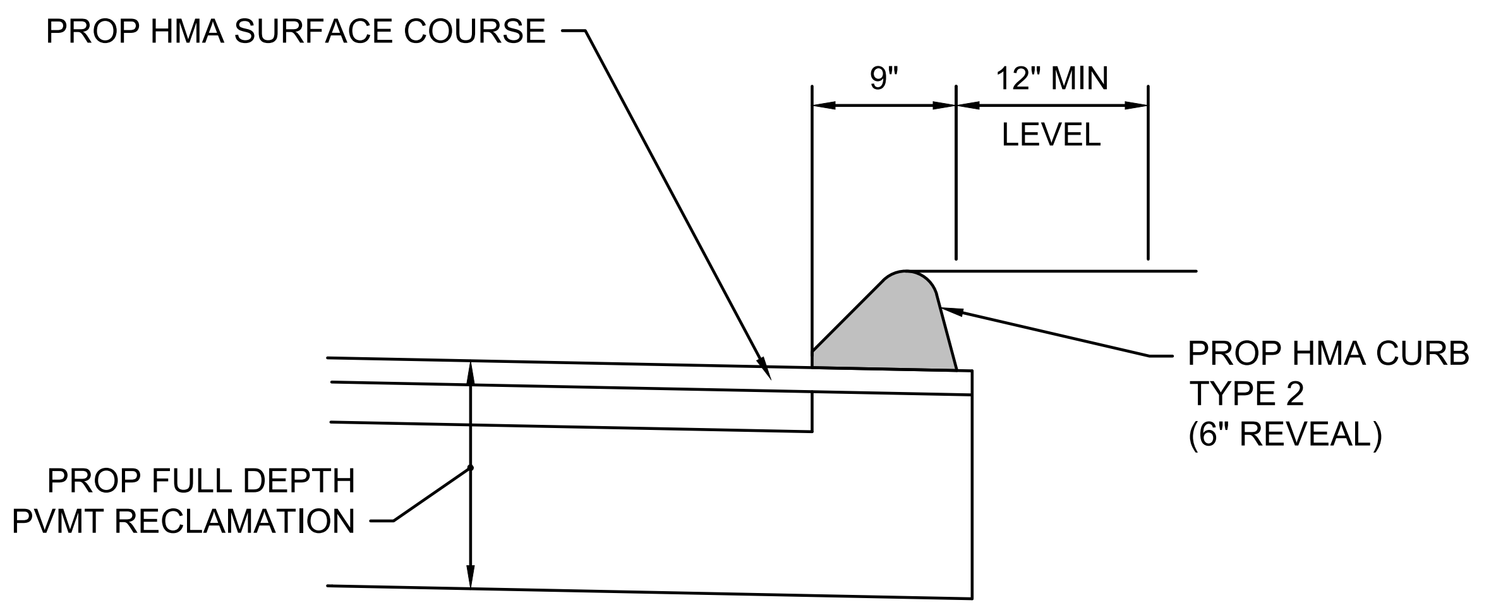


(FOR USE WITH EXISTING CATCH BASINS)

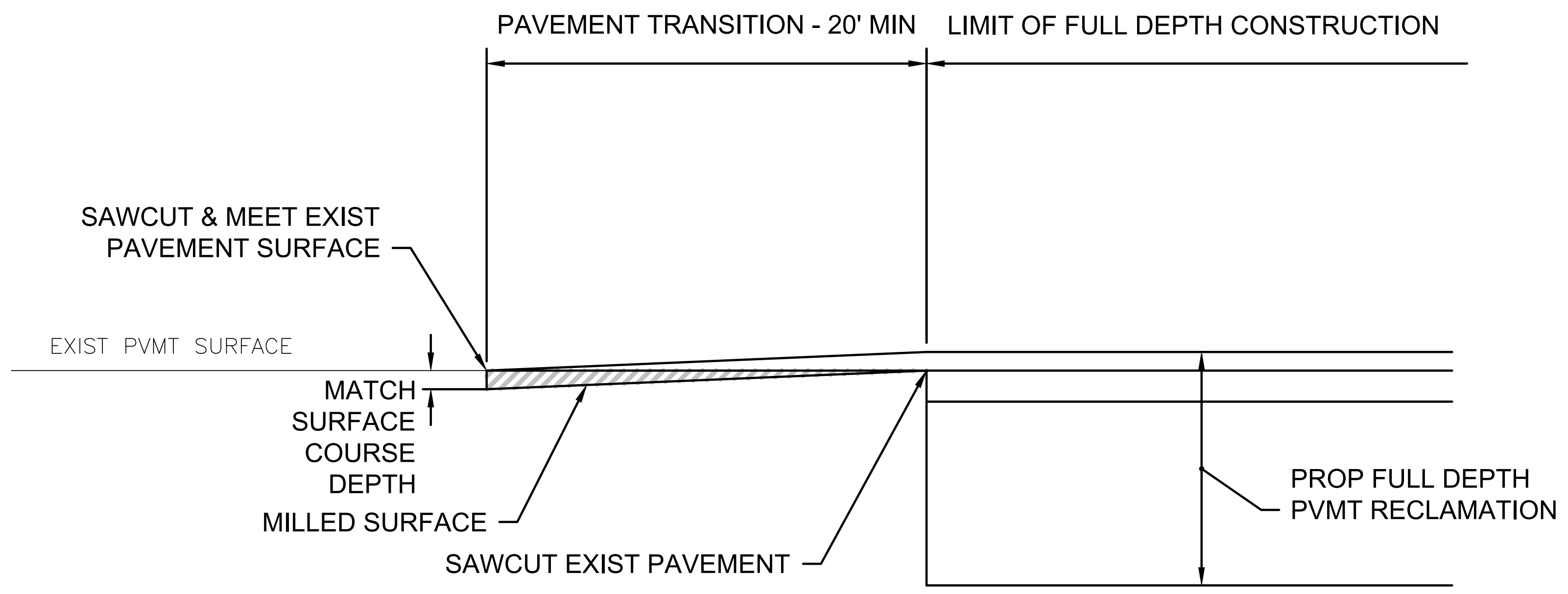
SILT SACK INLET PROTECTION
NOT TO SCALE

NOTES:

1. THE EXPOSED EDGES OF ALL SAWCUT JOINTS SHALL BE TREATED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALANT.


PROP HMA SURFACE COURSE
9"
12" MIN
LEVEL
PROP HMA CURB TYPE 2 (6" REVEAL)
PROP FULL DEPTH PVMT RECLAMATION

HOT MIX ASPHALT CURB INSTALLATION IN PROPOSED PAVEMENT AREAS
NOT TO SCALE

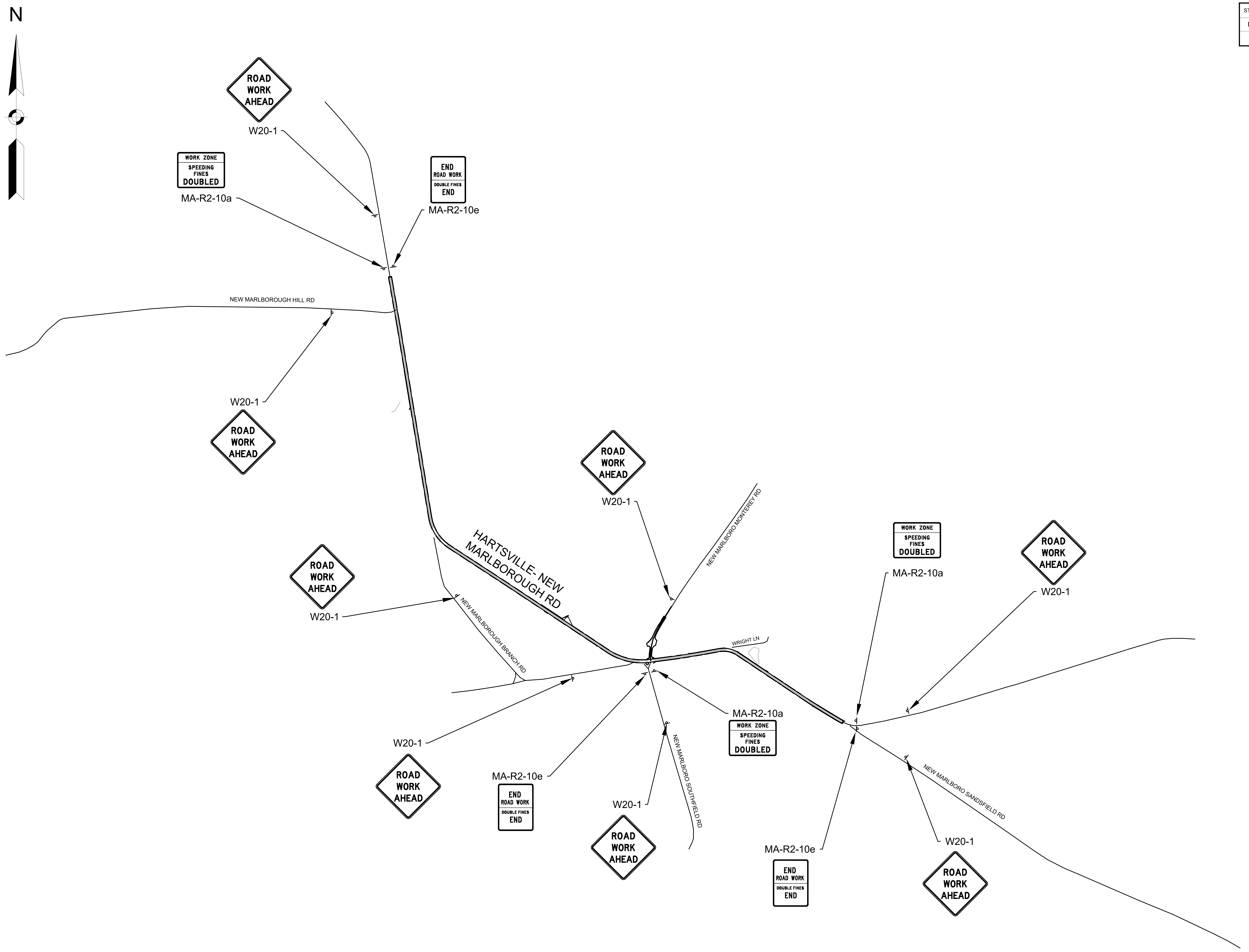

PAVEMENT TRANSITION - 20' MIN
LIMIT OF FULL DEPTH CONSTRUCTION
SAWCUT & MEET EXIST PAVEMENT SURFACE
EXIST PVMT SURFACE
MATCH SURFACE COURSE DEPTH
MILLED SURFACE
SAWCUT EXIST PAVEMENT
PROP FULL DEPTH PVMT RECLAMATION

FULL DEPTH PAVEMENT TRANSITION AT LIMITS OF WORK
NOT TO SCALE

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	13	17
PROJECT FILE NO.			

TEMPORARY TRAFFIC CONTROLS
ADVANCE WARNING SIGNS


N
ROAD WORK AHEAD
W20-1
WORK ZONE SPEEDING FINES DOUBLED
MA-R2-10a
END ROAD WORK DOUBLE FINES END
MA-R2-10e
NEW MARLBOROUGH HILL RD
W20-1
ROAD WORK AHEAD
ROAD WORK AHEAD
W20-1
NEW MARLBORO MONTEREY RD
ROAD WORK AHEAD
W20-1
HARTSVILLE- NEW MARLBOROUGH RD
NEW MARLBOROUGH BRANCH RD
WRIGHT LN
WORK ZONE SPEEDING FINES DOUBLED
MA-R2-10a
ROAD WORK AHEAD
W20-1
W20-1
ROAD WORK AHEAD
MA-R2-10a
WORK ZONE SPEEDING FINES DOUBLED
MA-R2-10e
END ROAD WORK DOUBLE FINES END
W20-1
ROAD WORK AHEAD
NEW MARLBORO SOUTHFIELD RD
MA-R2-10e
END ROAD WORK DOUBLE FINES END
NEW MARLBORO SANDSFIELD RD
W20-1
ROAD WORK AHEAD

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NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	14	17
PROJECT FILE NO.			

TEMPORARY TRAFFIC CONTROL PLAN

40828.00_HD-7 NEW MARLBOROUGH ROUTE 57 - TTC PLAN.DWG Plotted on 3-Apr-2023 2:53 PM

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS. UNLESS SUPERCEDED BY THESE PLANS.
2. ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
5. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES." AND/OR MASH "MANUAL FOR ASSESSING SAFETY HARDWARE."
6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
7. THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING LIGHTS.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
11. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZING DEVICE OR BARRIER.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

LEGEND:

- ● REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- ▨ TYPE III BARRICADE
- ▭ CHANGEABLE MESSAGE SIGN
- ●●● ARROW BOARD
- ▨ WORK ZONE
- ➡ DIRECTION OF TRAFFIC
- ▦ IMPACT ATTENUATOR
- ▭ MEDIAN BARRIER
- ⊟ MEDIAN BARRIER WITH WARNING LIGHTS
- ▭ WORK VEHICLE
- ⊠ TRUCK MOUNTED ATTENUATOR
- ◄—● TRAFFIC OR PEDESTRIAN SIGNAL
- —●— SIGN

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

Number of Lanes		Number of Studies	Average Capacity	
NORMAL (existing)	OPEN (to traffic)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

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Notes
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FIGURE Gen-1

GENERAL GUIDELINES

CONVENTIONAL ROADWAY– A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

EXPRESSWAY– A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

FREEWAY– A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

LOW-VOLUME ROAD– A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD, OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: MUTCD LATEST EDITION

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

Type of Taper	Taper Length (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MINIMUM 100 FT MAXIMUM
DOWNSTREAM TAPER	50 FT MINIMUM 100 FT PER LANE

Source: Table 6C-3 MUTCD LATEST EDITION

FORMULAS FOR DETERMINING TAPER LENGTHS

Speed Limit (S)	Taper Length (L) Feet
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

WHERE: L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICAPATED OPERATING SPEED IN MPH

Source: Table 6C-4 MUTCD LATEST EDITION

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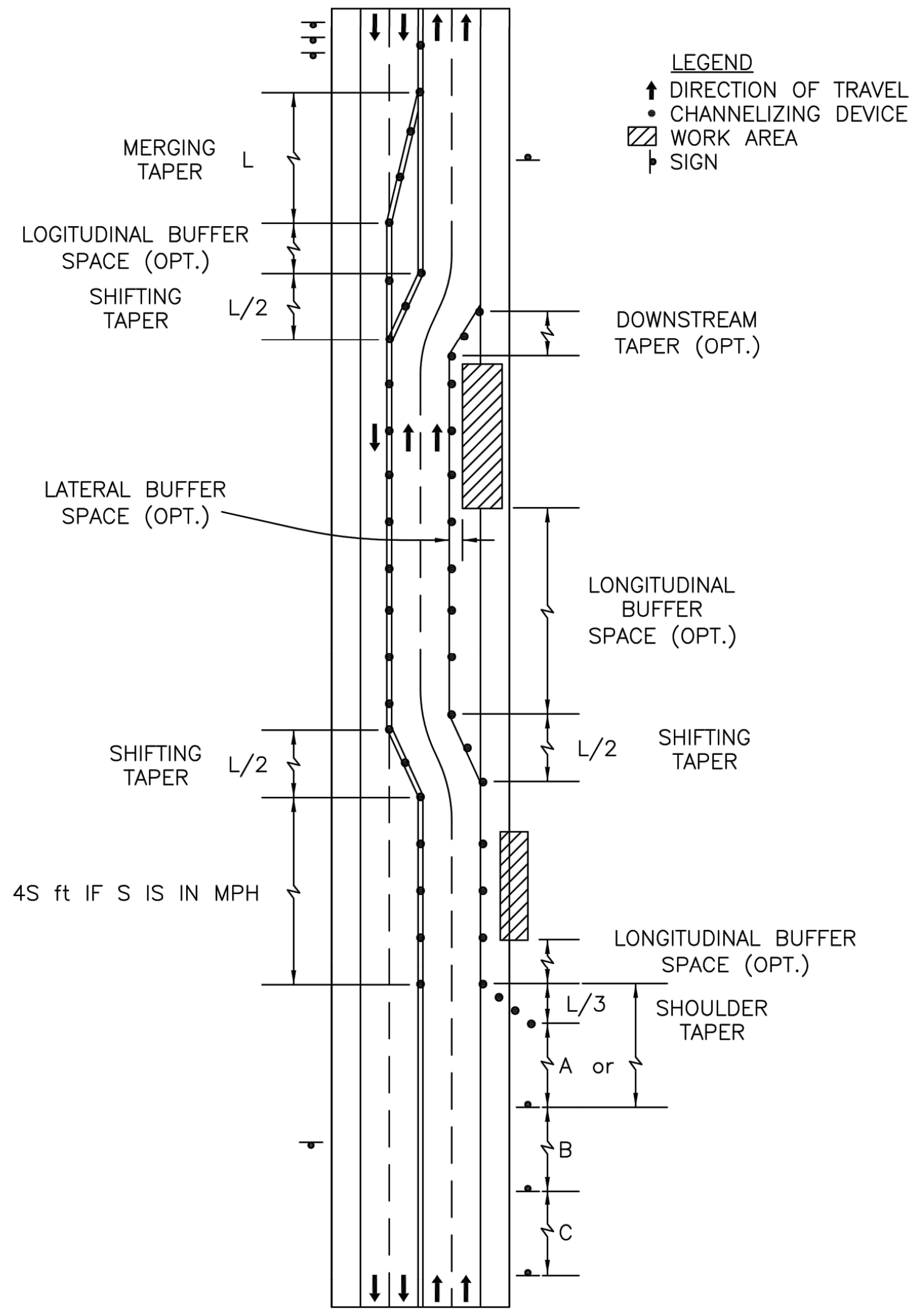
FIGURE Gen-3

NOTES ON WORK ZONE DISTANCES



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Development of
TemporaryTraffic Control Plans

FIGURE Gen-5

TYPES OF TAPERS AND BUFFER SPACES

NOT TO SCALE

SUGGESTED WORK ZONE WARNING SIGN SPACING

Road Type	Distance Between Signs**		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350
MOST OTHER ROADWAYS*	500	500	500
FREEWAYS AND EXPRESSWAYS*	1,000	1,500	2,640

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

MA-R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED* (mph)	DISTANCE (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION

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FIGURE Gen-2

NOTES ON WORK ZONE DISTANCES

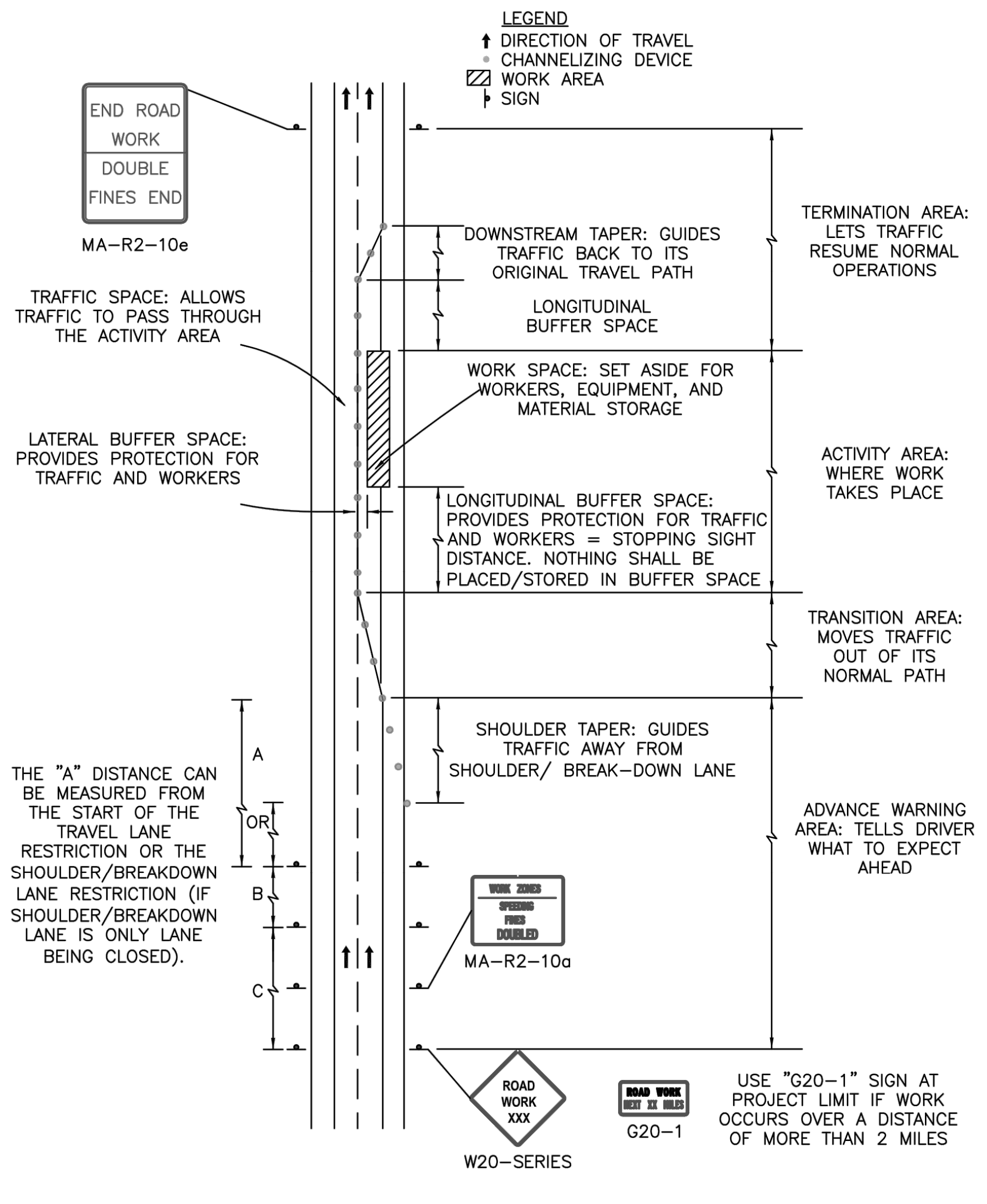
LEGEND
DIRECTION OF TRAVEL
CHANNELIZING DEVICE
WORK AREA
SIGN
END ROAD WORK
DOUBLE FINES END
MA-R2-10e
TRAFFIC SPACE: ALLOWS TRAFFIC TO PASS THROUGH THE ACTIVITY AREA
LATERAL BUFFER SPACE: PROVIDES PROTECTION FOR TRAFFIC AND WORKERS
DOWNSTREAM TAPER: GUIDES TRAFFIC BACK TO ITS ORIGINAL TRAVEL PATH
LONGITUDINAL BUFFER SPACE
WORK SPACE: SET ASIDE FOR WORKERS, EQUIPMENT, AND MATERIAL STORAGE
LONGITUDINAL BUFFER SPACE: PROVIDES PROTECTION FOR TRAFFIC AND WORKERS = STOPPING SIGHT DISTANCE. NOTHING SHALL BE PLACED/STORED IN BUFFER SPACE
SHOULDER TAPER: GUIDES TRAFFIC AWAY FROM SHOULDER/ BREAK-DOWN LANE
TERMINATION AREA: LETS TRAFFIC RESUME NORMAL OPERATIONS
ACTIVITY AREA: WHERE WORK TAKES PLACE
TRANSITION AREA: MOVES TRAFFIC OUT OF ITS NORMAL PATH
ADVANCE WARNING AREA: TELLS DRIVER WHAT TO EXPECT AHEAD
THE "A" DISTANCE CAN BE MEASURED FROM THE START OF THE TRAVEL LANE RESTRICTION OR THE SHOULDER/BREAKDOWN LANE RESTRICTION (IF SHOULDER/BREAKDOWN LANE IS ONLY LANE BEING CLOSED).
A
OR
B
C
WORK ZONES
SPEEDING
FINES
DOUBLED
MA-R2-10a
ROAD WORK XXX
W20-SERIES
ROAD WORK NEXT XX MILES
G20-1
USE "G20-1" SIGN AT PROJECT LIMIT IF WORK OCCURS OVER A DISTANCE OF MORE THAN 2 MILES

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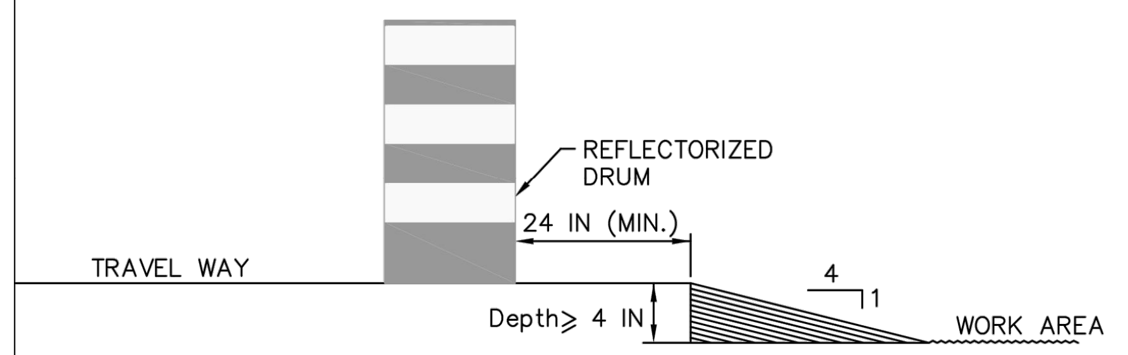
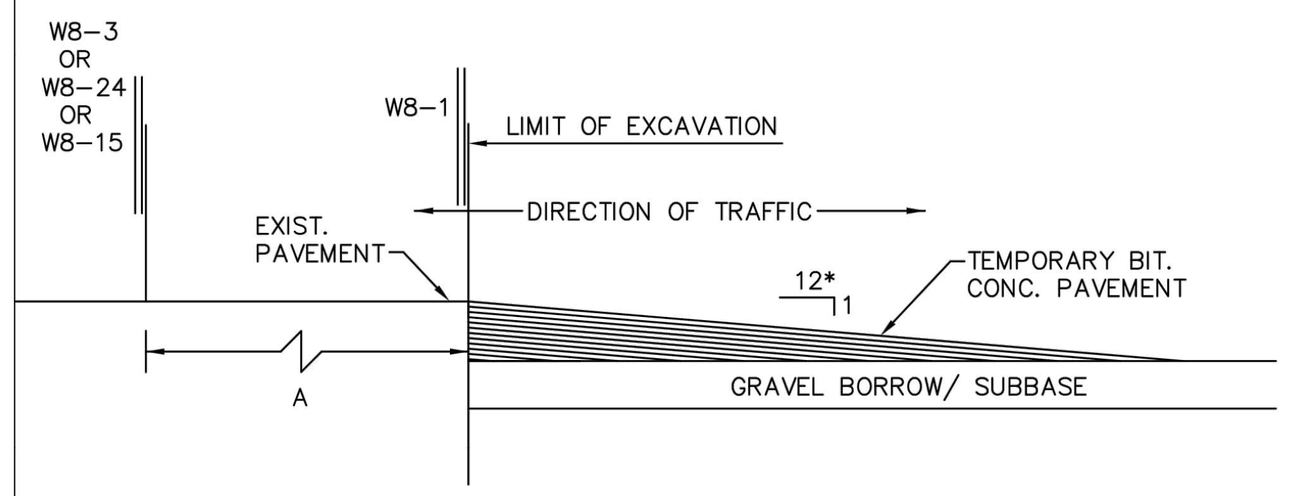
FIGURE Gen-4

COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE

NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE



LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE

* – INCREASE SLOPE RATIO FOR HIGHER SPEEDS

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FIGURE Gen-6

LATERAL AND LONGITUDINAL DROP-OFF DETAILS

NOT TO SCALE

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	15	17
PROJECT FILE NO.			

TEMPORARY TRAFFIC CONTROL PLAN

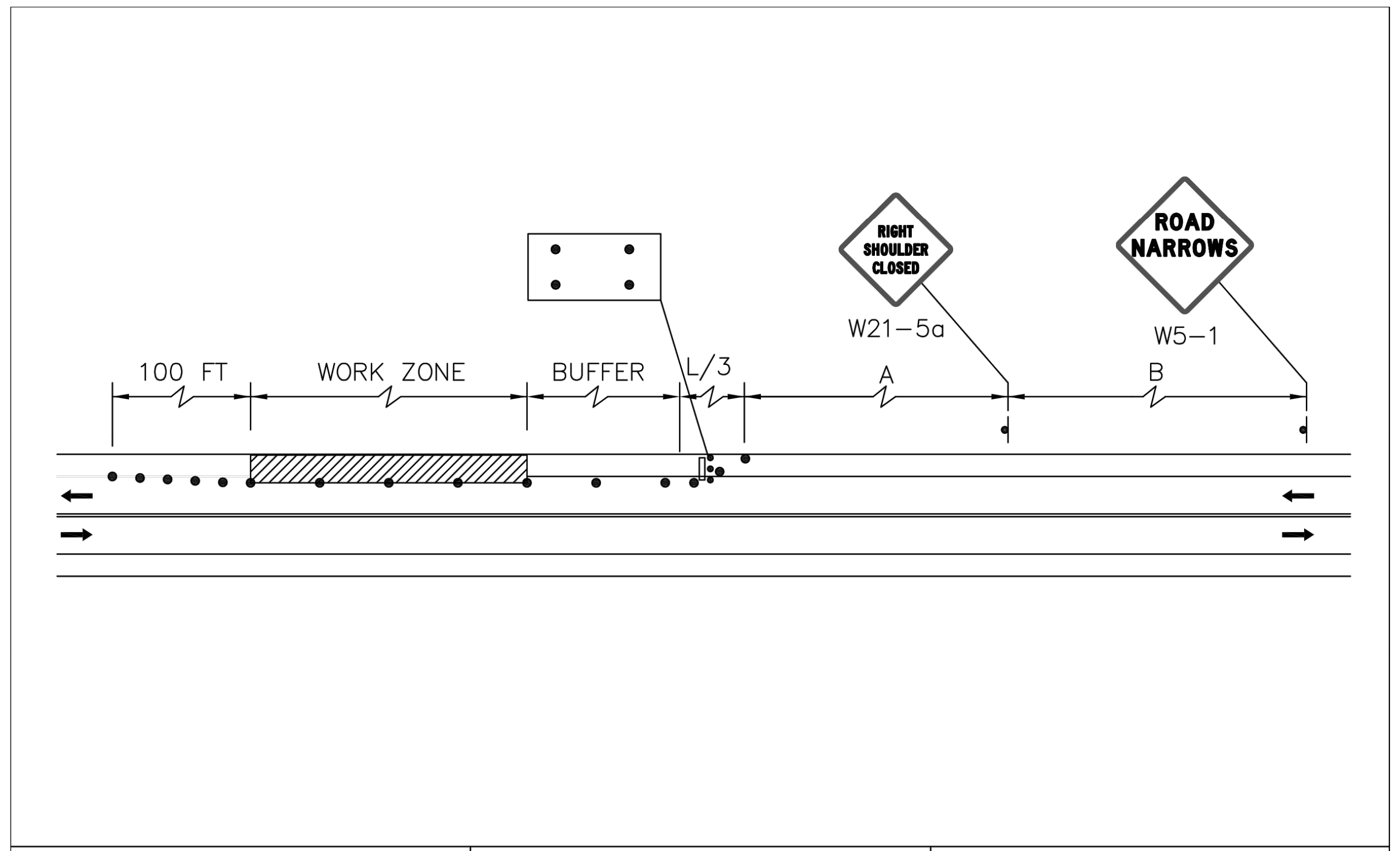

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FIGURE TLR-1

TWO LANE ROAD
SHOULDER CLOSED
NOT TO SCALE

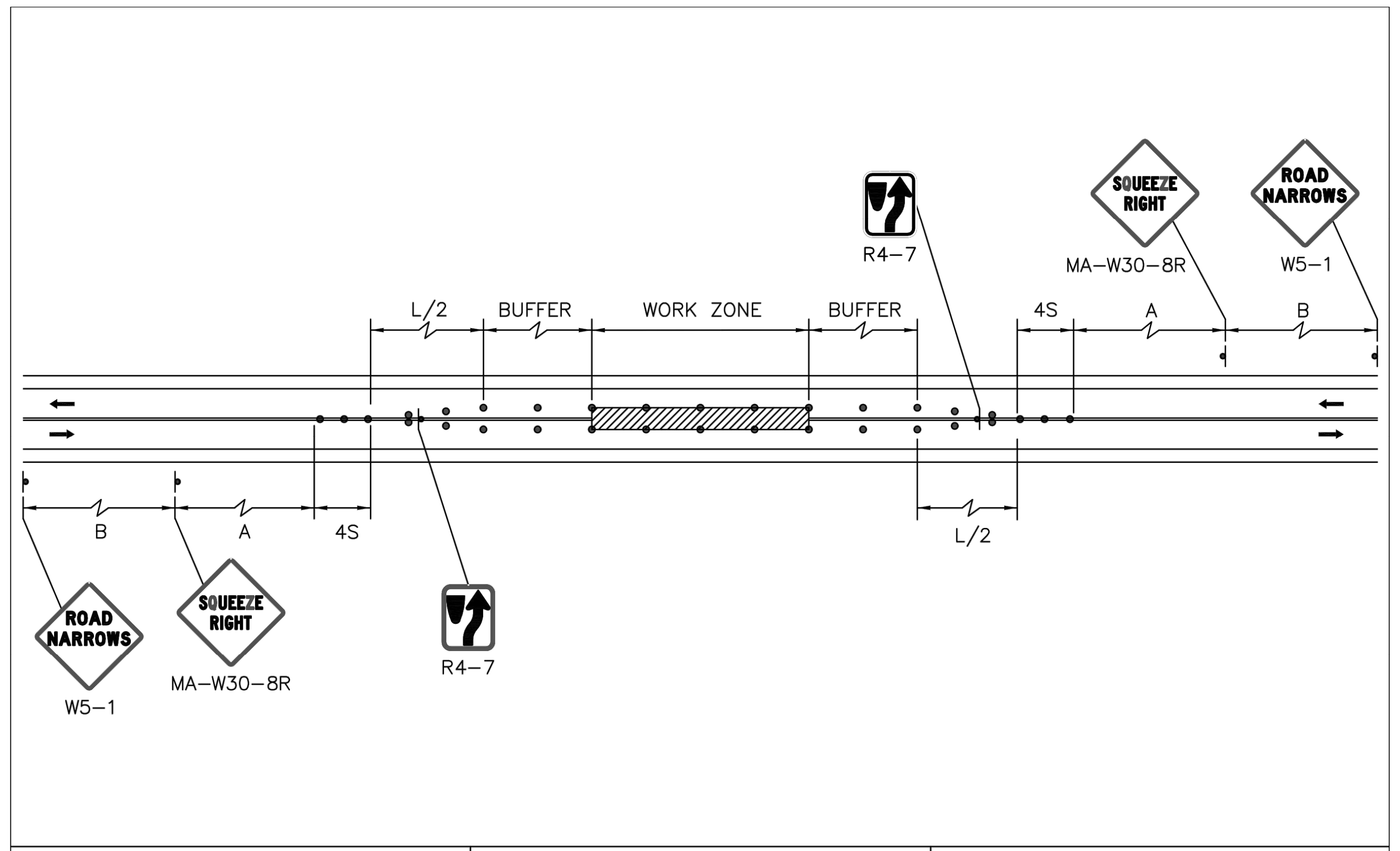

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FIGURE TLR-3

TWO LANE ROAD
CENTER OF ROAD CLOSURE
NOT TO SCALE

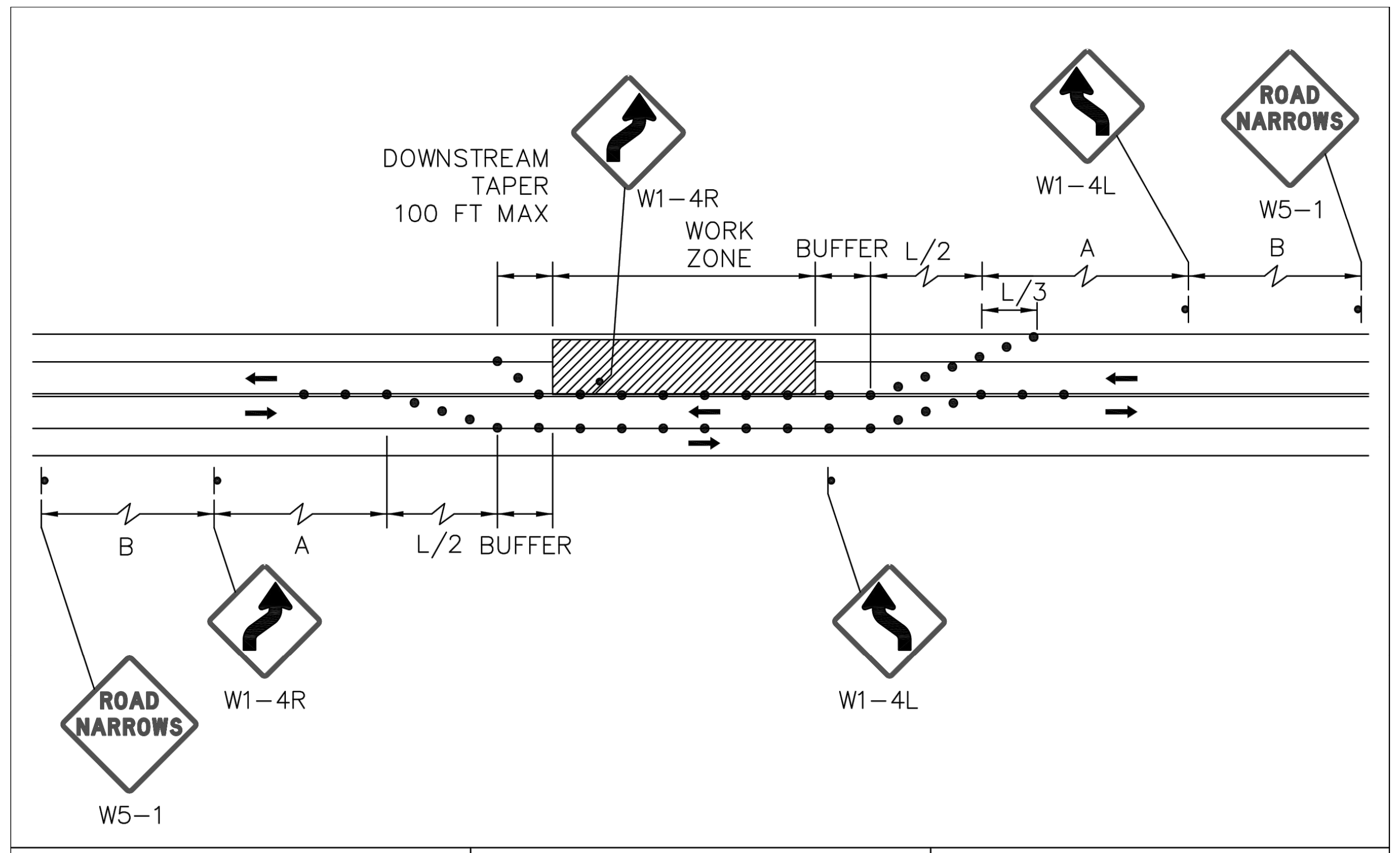

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FIGURE TLR-2

TWO LANE ROAD
SHOULDER AND TRAVEL LANE CLOSED
NOT TO SCALE

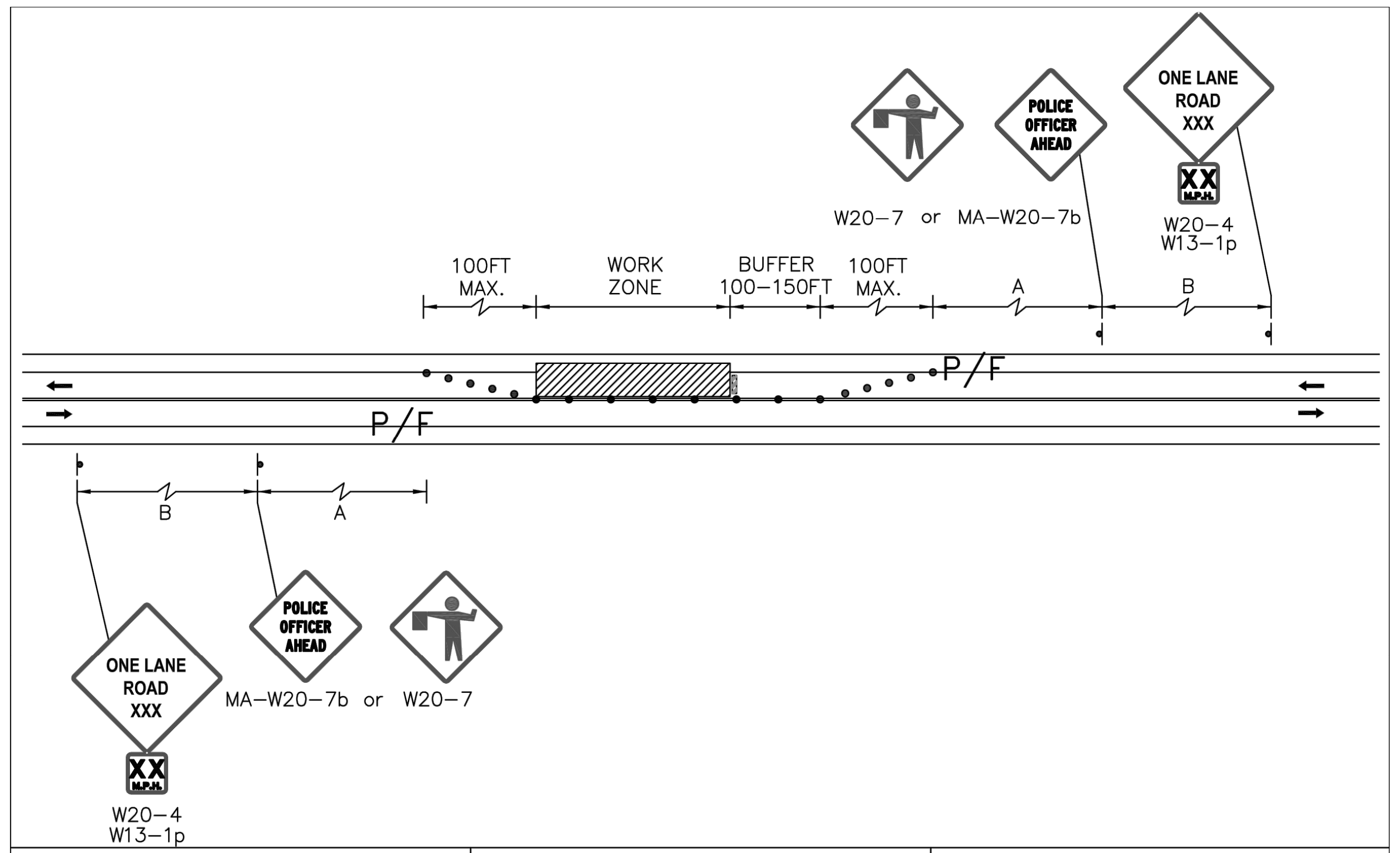

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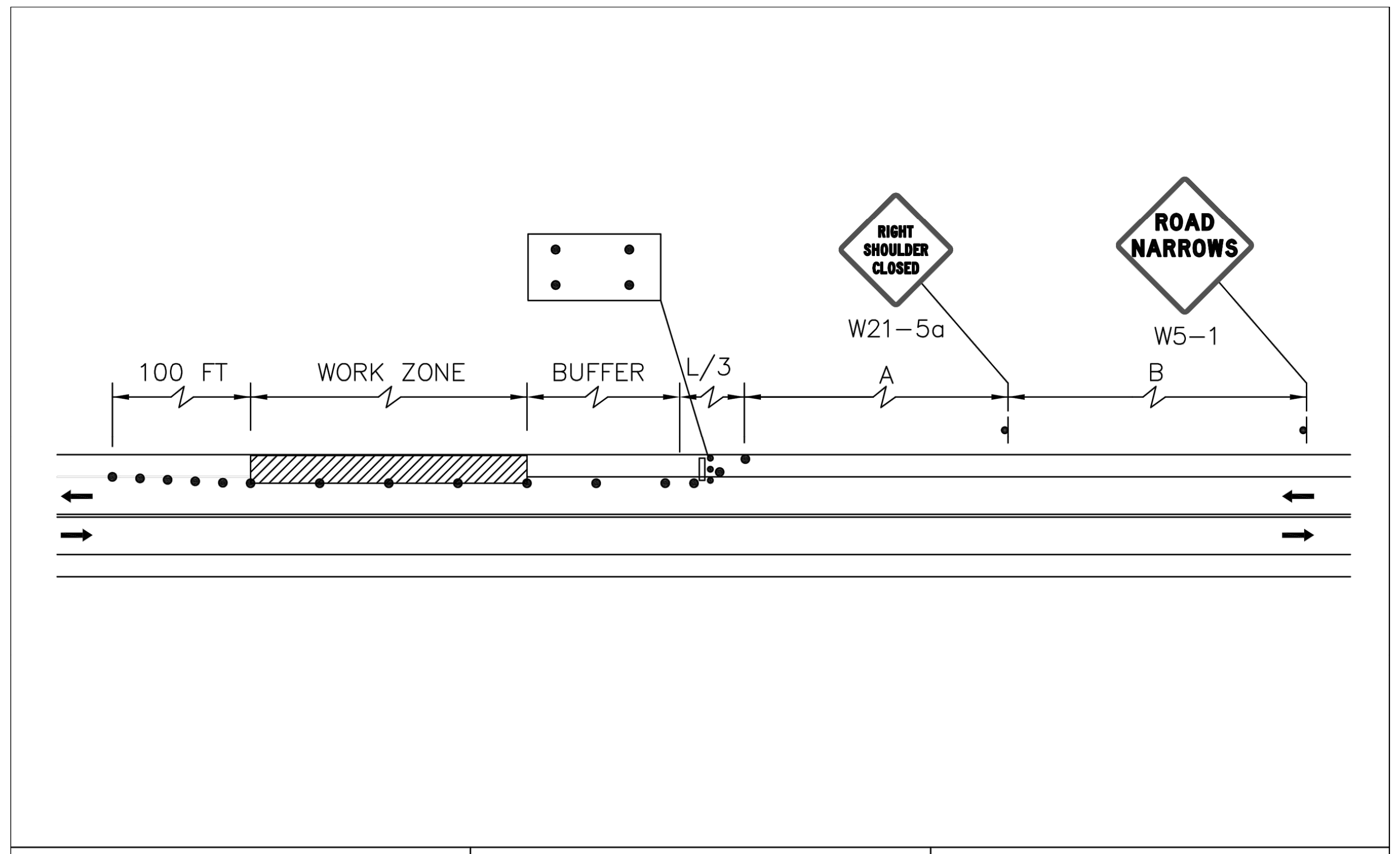
FIGURE TLR-5

TWO LANE ROAD
ONE LANE ALTERNATING TRAFFIC
NOT TO SCALE

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	16	17
PROJECT FILE NO.			

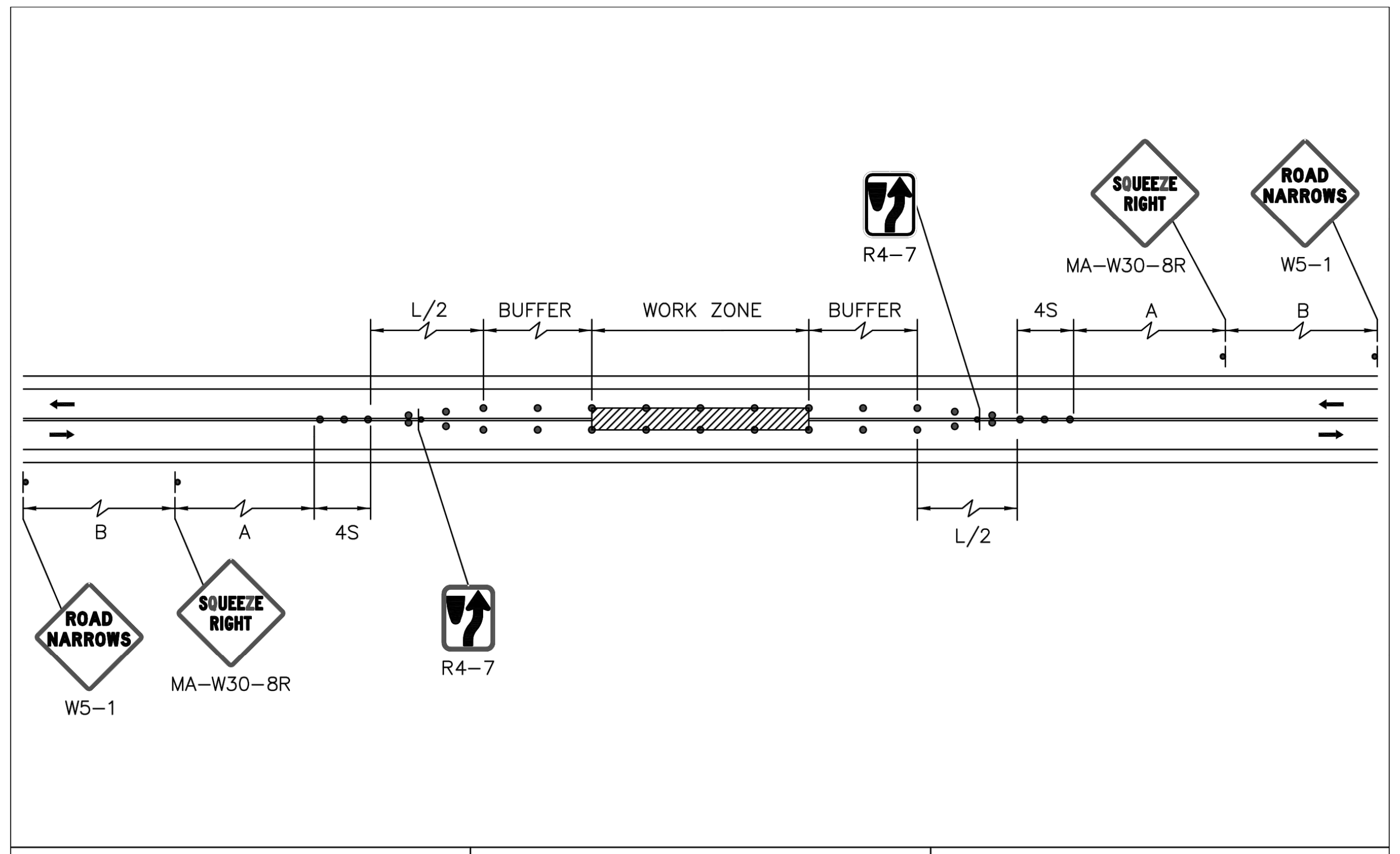
TEMPORARY TRAFFIC CONTROL PLAN



massDOT Massachusetts Department of Transportation Highway Division

Standard
Details and Drawings
for the
Development of
TemporaryTraffic Control Plans

FIGURE TLR-1
TWO LANE ROAD
SHOULDER CLOSED
NOT TO SCALE



massDOT Massachusetts Department of Transportation Highway Division

Standard
Details and Drawings
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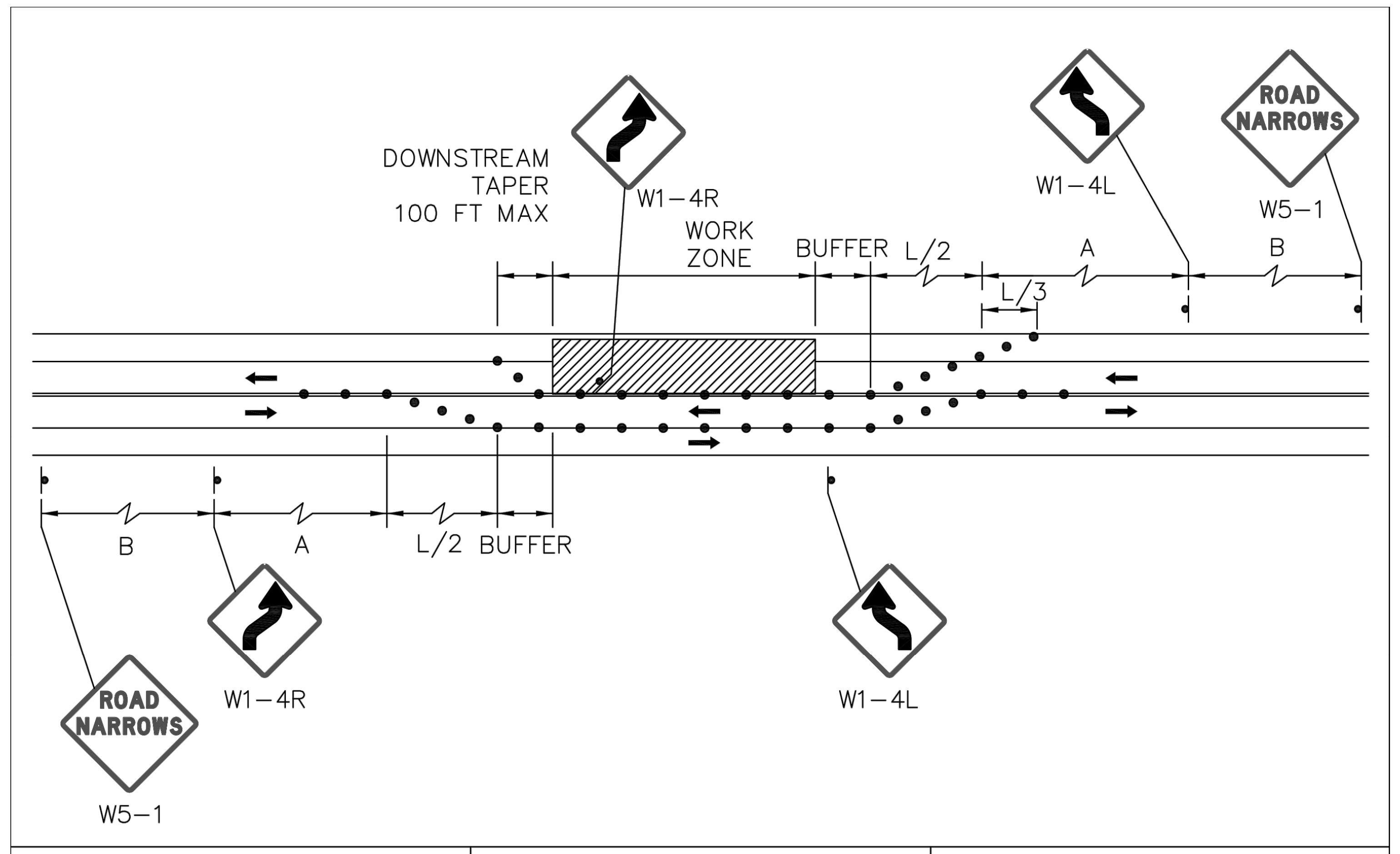
Development of
TemporaryTraffic Control Plans

FIGURE TLR-3
TWO LANE ROAD
CENTER OF ROAD CLOSURE
NOT TO SCALE



massDOT Massachusetts Department of Transportation Highway Division

Standard
Details and Drawings
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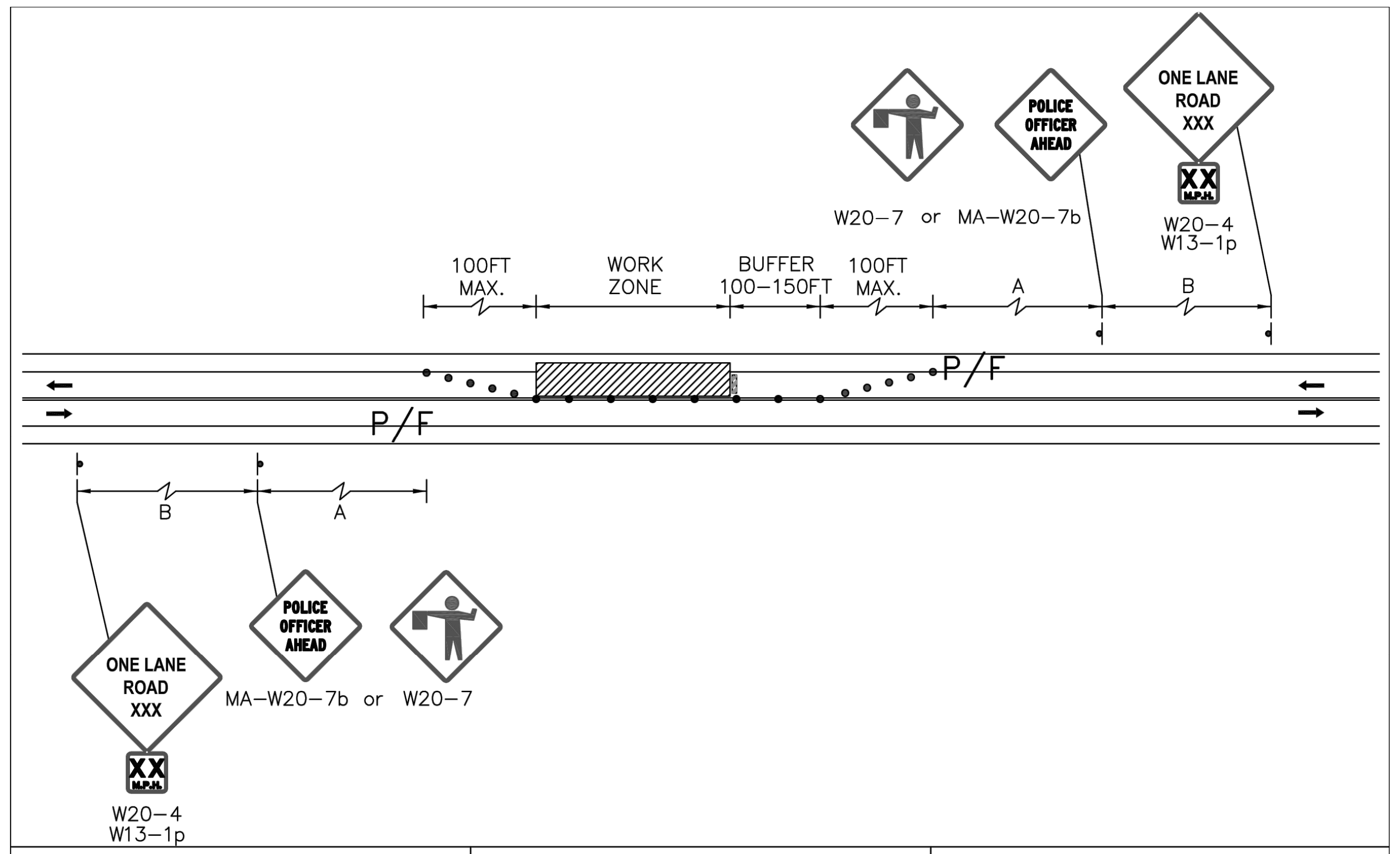
Development of
TemporaryTraffic Control Plans

FIGURE TLR-2
TWO LANE ROAD
SHOULDER AND TRAVEL LANE CLOSED
NOT TO SCALE



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Standard
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FIGURE TLR-5
TWO LANE ROAD
ONE LANE ALTERNATING TRAFFIC
NOT TO SCALE

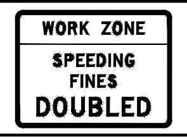
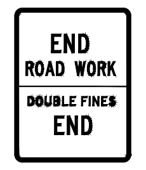
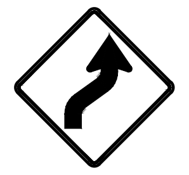
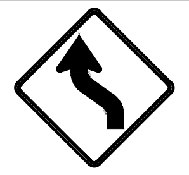
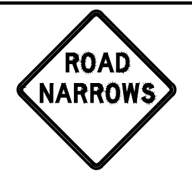
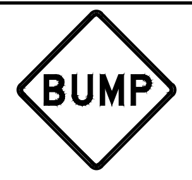
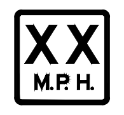
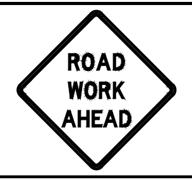
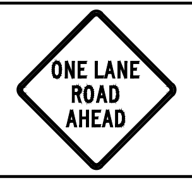
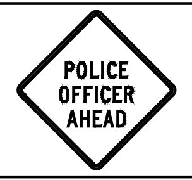
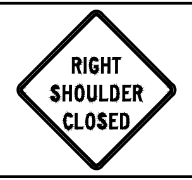
40828.00_HD-7 NEW MARLBOROUGH ROUTE 57 - TTC PLAN.DWG Plotted on 3-Apr-2023 2:54 PM

NEW MARLBOROUGH
HARTSVILLE-NEW MARLBOROUGH RD (ROUTE 57)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	17	17
PROJECT FILE NO.			

TEMPORARY TRAFFIC CONTROL PLAN

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA (S.F.)
	WIDTH (in)	HEIGHT (in)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
MA-R2-10a	48	36		SEE MASSDOT STANDARDS			3	ORANGE WHITE	BLACK	BLACK		12.00	36.00
MA-R2-10e	36	48					3	ORANGE WHITE	BLACK	BLACK		12.00	36.00
W1-4R	36	36					2	FLUORESCENT ORANGE	BLACK	BLACK		9.00	18.00
W1-4L	36	36					2	FLUORESCENT ORANGE	BLACK	BLACK		9.00	18.00
W5-1	36	36					2	FLUORESCENT ORANGE	BLACK	BLACK		9.00	18.00
W8-1	36	36					5	FLUORESCENT ORANGE	BLACK	BLACK		9.00	45.00
W13-1	24	24					2	FLUORESCENT ORANGE	BLACK	BLACK		4.00	8.00
W20-1 (AHD)	36	36					8	FLUORESCENT ORANGE	BLACK	BLACK		9.00	72.00
W20-4	36	36					2	FLUORESCENT ORANGE	BLACK	BLACK		9.00	18.00
MA-W20-7b	36	36		SEE MASSDOT STANDARDS			2	FLUORESCENT ORANGE	BLACK	BLACK		9.00	18.00
W21-5aR	36	36		SEE 2009 M.U.T.C.D.			2	FLUORESCENT ORANGE	BLACK	BLACK		9.00	18.00

TEMPORARY TRAFFIC CONTROL NOTES

GENERAL

1. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES - 2009 EDITION (M.U.T.C.D.); MASSDOT'S STANDARD SPECIFICATIONS; MASSDOT'S STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS, JUNE 2017 EDITION, AND THE LATEST REVISIONS.
2. UNLESS WRITTEN PERMISSION FROM MASSDOT IS OBTAINED, ALL TRAVEL WAYS WITHIN MASSDOT'S RIGHT OF WAY CAN ONLY BE OCCUPIED DURING THE HOURS STATED IN THE SPECIAL PROVISIONS, SUBSECTION 7.09 PUBLIC SAFETY AND CONVENIENCE.
3. WARNING SIGNS SHALL HAVE AN ORANGE BACKGROUND, AND REGULATORY SIGNS SHALL BE BLACK TEXT ON A WHITE BACKGROUND UNLESS OTHERWISE NOTED.

CONSTRUCTION SIGNING

1. FINAL LOCATION OF SIGNS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. AT THE END OF EACH WORKDAY/SHIFT, THE CONTRACTOR SHALL COVER TEMPORARY TRENCHES WITH STEEL PLATES AND PROVIDE A TEMPORARY SIDEWALK WITH A STABLE AND FIRM SURFACE. TEMPORARY TRAFFIC CONTROL DEVICES, I.E., DRUMS AND CONSTRUCTION FENCES, SHALL BE REMOVED FROM THE TRAVELWAY OR MOVED TO THE BACK OF THE SIDEWALK.
3. FOURTEEN DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL PLACE PORTABLE CHANGEABLE MESSAGE SIGNS ON EACH MAJOR APPROACH.

MISCELLANEOUS

1. THE WORKSITE SHALL BE ADEQUATELY PROTECTED (DURING BOTH WORKING AND NON-WORKING HOURS) TO ENSURE THE SAFETY OF ALL MODES OF TRAFFIC.
2. AT ALL TIMES, MAINTAIN INGRESS AND EGRESS TO ALL STREETS AND DRIVES.
3. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE THE TEMPORARY MARKINGS AND RESTORE THE PAVEMENT MARKINGS TO THEIR ORIGINAL LOCATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PEDESTRIAN ACCESS THROUGH THE WORK ZONE THAT MEETS THE LATEST ADA/AAB GUIDELINES.
5. THE CONTRACTOR SHALL COORDINATE WITH THE MBTA REGARDING SHIPPING/RELOCATING/ADDING OR ELIMINATING ANY BUS STOPS WITHIN THE PROJECT LIMITS.
6. THE CONTRACTOR SHALL PROVIDE A MAXIMUM DETOUR OF 250 FEET OF SIDEWALK ALONG THE LENGTH OF THE PROJECT.

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